

Amphenol Circular Connectors for Printed Circuit Board Applications



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Circular Connectors for Printed Circuit Board Applications

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Shell Styles with PCB Contacts:

- MIL-DTL-38999 TV, Series III Shell Styles, Including Hermetic 256-263
- MIL-DTL-38999 JT, Series II Shell Styles, Including Hermetic 264-268
- MIL-DTL-38999 LJT, Series I Shell Styles, Including Hermetic 269-275
- Stand-off Adapter for use with MIL-DTL-38999 PCB Connectors 276



PCB Contacts



PCB Connector Typical Markets:

- Military and Commercial Aviation
- Space & Satellites
- Military Vehicles
- Shipboard
- Instrumentation

Amphenol® Circular Connectors for Printed Circuit Board Applications



Amphenol provides circular connectors with PC Tail contacts. This catalog section features the 38999 Series III, II, and I connectors which are ideal for printed circuit boards applications, either with rigid attachment or with flex print assembly attachment. For information on other amphenol circular connector with PC Tail contacts consult Powell Electronics.

MIL-DTL-38999 CONNECTORS, METAL & COMPOSITE

- Lightweight, compact, high density and high reliability cylindrical
- Operating voltage to 900 VAC (RMS) at sea level
- Environmentally resistant
- Solder or crimp rear release contacts in mating plug
- Series I (LJT) - Bayonet coupling
 - Scoop-proof (recessed pins) offers maximum contact protection
- Series II (JT) - Bayonet coupling
 - For applications requiring maximum weight/space savings and reliability
- Series III (Tri-Start) - Threaded, quick coupling in one complete turn
 - Designed for general duty as well as severe environmental applications
 - Superior EMI shielding with grounding fingers and metal-to-metal mating
 - Filter/Transient protection versions available
 - Scoop-proof contact protection
 - Stainless steel firewall versions, and composite versions
 - Available in Hermetics



Special 38999 Connector with Stand-off Shell and PC Tails

See MIL-DTL-38999 Series I, II, and III sections of this catalog for more detailed information.
Note: MIL-DTL-38999 supersedes MIL-C-38999.

How to Measure the PCB Tail Length

The tail length of the PCB is the portion of the contact that extends beyond the rear of the shell. This length will vary in relationship to the mounting flange, depending on the series of connector selected. Standard lengths are shown on the connector shell style drawings in this catalog. These shell style drawing pages also provide how to order part numbering for standard PCB cylindrical connectors. When computing the desired tail length, it is important to take into consideration the following factors:

- The connector series and shell style.
- The mounting style of the receptacle; jam nut (D hole) or panel mount (four holes). This can affect the overall length of the tail.
- The extension of the tail beyond the opposite side of the board or the flex.
- The space required to adequately clean flux from between the board or flex and the rear of the connector shell. Connectors that are mounted flush against the board may trap soldering flux which could lead to corrosion of the solder joints.

Would Alignment Discs, Headers or Special Stand-off Shells be Beneficial?

The answer is yes, any mechanical methods needed to stabilize the board or flex to the connector and/or the panel is beneficial. The PCB tails shown in this catalog are of one diameter. Stepped tails or PCB tails with an increased diameter on a designated portion may be required for certain applications.

Alignment discs are available which provide ease of alignment of pins to boards, protection during shipment and optimized electrical circuit separation. Header assemblies (see pages 106 & 107) are available which provide time and cost saving potentials. Standoffs may be required for certain applications. Amphenol has developed a new stand-off adapter (see page 276) which may eliminate the need for special stand-off shell designs. Connectors with clinch nuts can be provided. Please call Amphenol to discuss any optional designs or any special requirements.



38999 Series III Box Mount Connector with PC Tails



38999 Series III Connector with a Special Configuration Composite Shell and PC Tails



Stand-off Adapter on a Jam Nut Receptacle.



Universal Header Assemblies are available for Flex Print/PC Board Mounting. Beneficial especially when electrical testing of the connector requires it to be removed and reattached.

III
II
I
SJT
38999

Matrix 2
26482

Matrix Pyle
83723 III

Crimp Rear Release Matrix
5015

Pyle
26500

Printed Circuit Board

EMI Filter Transient

Fiber Optics

High Speed Contacts

Options Others



Guide to Selecting a PCB Circular Connector, Cont.

38999
SJT I II III

26482
Matrix 2

83723 III
Matrix Pyle

5015
Crimp Rear Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

What Determines the Diameter of the PCB Tail?

The outside diameter of the PCB tail is determined by the inside diameter of the plated through-hole on the board or flex print. The standard or most popular diameters are shown in the chart on the next page and are called out in the connector illustrations in this catalog.

Standard diameters of PCB tails

Connector Series	Size 16 Contact	Size 20 Contact	Size 22D Contact
MIL-DTL-38999	.062 ±.001	.019 ±.001	.019 ±.001

Should PCB Tails be Gold Plated or Pre-tinned?

The standard PCB tails for MIL-DTL-38999 receptacles have gold plating, .00005 inches over nickel. Amphenol can substitute a pre-tinned version of these tails to facilitate the termination process. This pre-tinning is a 60/40 lead-tin alloy. Call Powell for further information on pre-tinning and any other plating of contacts not covered in this catalog.

Would Flex Assemblies be Necessary or Beneficial for the Application?

Flex print can radically simplify the assembly of a connector to a system, as well as eliminate wiring errors. Amphenol offers connector flex assemblies through APC, Amphenol Printed Circuits division. Features and benefits of using flex technology include:

- Available for MIL-DTL-38999 (including filter EMI/EMP types), circular connectors
- Sculptures® Flexible Circuits with built-in terminations
- Eliminates failures associated with crimped or solder-on contacts
- Geometrically fit tight space requirements and create a self-locking terminal pad

Should Other PC Tail Contact Types be Considered?

Press-Fit Connectors with compliant pins are available which engage the plated through-holes in the board without the need for soldering. This optional contact style offers the following benefits:

- Improved board processing time
- Excellent temperature performance
- Ideal for low-lead applications

For more information on Press-Fit connectors with compliant pins see page 416.

Special Quadrax contacts have been designed with PC tails. Coax, twinax and triax contacts can also have PC tails. Refer to the High Speed contacts section of this catalog.



Compliant Pin Contacts in a Bayonet 38999 Catalog



Special Design with Longer PC Tails in a 38999 Composite Shell Connector. Also shows an Alignment Disc.



Flex Termination for Attachment to PC Boards



Quadrax PC Tail Contacts Combined with Standard PC Tail Contacts



Quadrax Contacts with PC Tails in a 38999 Connector with Special Stand-off Shell

Circular Connectors – PCB Contacts

Insert Availability



The following table lists the most commonly used insert arrangements for printed circuit board application of MIL-DTL-38999 circular connectors. This represents the most readily available patterns within these series. See illustrations of these selected patterns on the following pages. If you require other arrangements than what are shown here, consult Powell for further availability.

Example: Shell Size is the first number (8-3) Insert Arrangement is second number.

MIL-DTL-38999			Service Rating	Total Contacts	Contact Size*		
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III			22D	20	16
8-3	9-3		M/I	3		3	
8-35	9-35	9-35	M	6	6		
8-98	9-98	9-98	I	3		3	
10-5	11-5	11-5	I	5		5	
	11-6		I	6		6	
10-35	11-35	11-35	M	13	13		
12-3	13-3		II	3			3
12-35	13-35	13-35	M	22	22		
14-18	15-18	15-18	I	18		18	
14-19	15-19	15-19	I	19		19	
14-35	15-35	15-35	M	37	37		
16-26	17-26	17-26	I	26		26	
16-35	17-35	17-35	M	55	55		
18-11	19-11	19-11	II	11			11
18-32	19-32	19-32	I	32		32	
18-35	19-35	19-35	M	66	66		
20-27	21-27		I	27		27	
20-35	21-35	21-35	M	79	79		
20-41	21-41	21-41	I	41		41	
22-35	23-35	23-35	M	100	100		
22-55	23-55	23-55	I	55		55	
24-31			I	31			31
24-35	25-35	25-35	M	128	128		
24-61	25-61	25-61	I	61		61	

* For information on size 12 PC tail contacts consult Powell Electronics.

Printed Circuit Boards are available in other series like MIL-DTL-26482 and MIL-5015 Connectors. Please contact Powell Electronics for more information.



MIL-DTL-26482

- Medium size, widely used circular
- Operating voltage to 1,000 VAC (RMS) at sea level
- Series 1 (PT) - Bayonet coupling - most commonly used in PCB applications
- Environmentally resistant
- Solder or crimp front and rear release contacts in mating plug

Black/green zinc alloy plating (cadmium-free) available



MIL-5015 Connector

- Medium-heavy weight, time-tested circular
 - Operating voltage to 1,500 VAC (RMS) at sea level
 - Environmentally resistant or general duty
 - Threaded coupling
 - Solder or crimp rear insertion contacts in mating plug
- Black/green zinc alloy plating (cadmium-free) available

38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others



Circular Connectors – PCB Contacts

Alternate Positioning for MIL-DTL-38999

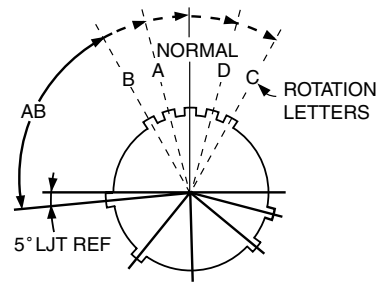
To avoid cross-plugging problems in applications requiring the use of more than one connector of the same series, size and arrangement, alternate rotations are available as indicated in the accompanying charts.

In MIL-DTL-38999 Series I, II and III connectors the rotation is based on rotating the master key/keyway in the connector shell.

A plug with a given rotation letter will mate with a receptacle with the same rotation letter. Only the master key/keyway rotates in the shell, and the insert always remains in the same position relative to the minor keys. Refer to diagrams below for each connector series.

LJT (MIL-DTL-38999 Series I) KEY/KEYWAY ROTATION

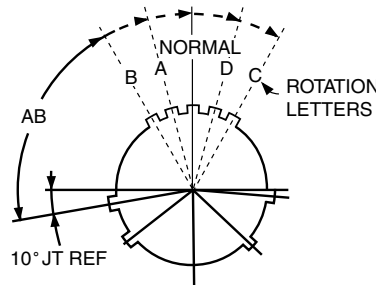
AB ANGLE OF ROTATION (Degrees)					
Shell Size	Normal°	A°	B°	C°	D°
9	95	77	—	—	113
11	95	81	67	123	109
13	95	75	63	127	115
15	95	74	61	129	116
17	95	77	65	125	113
19	95	77	65	125	113
21	95	77	65	125	113
23	95	80	69	121	110
25	95	80	69	121	110



RELATIVE POSSIBLE POSITION OF ROTATED MASTER KEYWAY (front face of LJT connector receptacle shown)

JT (MIL-DTL-38999 Series II) KEY/KEYWAY ROTATION

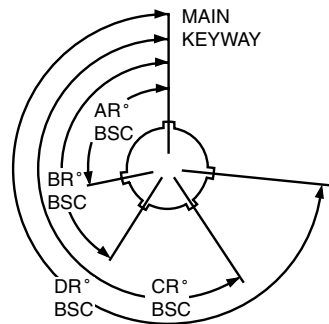
AB ANGLE OF ROTATION (Degrees)					
Shell Size	Normal°	A°	B°	C°	D°
8	100	82	—	—	118
10	100	86	72	128	114
12	100	80	68	132	120
14	100	79	66	134	121
16	100	82	70	130	118
18	100	82	70	130	118
20	100	82	70	130	118
22	100	85	74	126	115
24	100	85	74	126	115



RELATIVE POSSIBLE POSITION OF ROTATED MASTER KEYWAY (front face of JT connector receptacle shown)

Tri-Start (MIL-DTL-38999 Series III) KEY/KEYWAY ROTATION

Shell Size	Key & Keyway Arrangement Identification Letter	AR° BSC	BR° BSC	CR° BSC	DR° BSC
9	N	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
11, 13, and 15	E	91	131	197	240
	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
17 and 19	D	119	146	176	298
	E	51	141	184	242
	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
21, 23, and 25	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272
	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
	D	62	145	180	280
	E	79	153	197	272



RELATIVE POSSIBLE POSITION OF ROTATED MASTER KEYWAY (front face of Tri-Start connector receptacle shown)

MIL-DTL-38999 SERIES I LJT & SERIES II JT CONNECTORS ALTERNATE ROTATION CROSS REFERENCE LETTERS

Pins in Alternate Rotations	Sockets in Alternate Rotations
PA = E	SA = F
PB = R	SB = T
PC = W	SC = X
PD = Y	SD = Z

Explanation:
Use P at end of part number for pin contacts in Normal position. Use S at end of part number for socket contacts in Normal position. Use cross reference letters given in chart above for alternate rotations.

MIL-DTL-38999 SERIES III, TRI-START CONNECTORS ALTERNATE ROTATION CROSS REFERENCE LETTERS

Pins in Alternate Rotations	Sockets in Alternate Rotations
PA = G	SA = H
PB = I	SB = J
PC = K	SC = L
PD = M	SD = N
PE = R	SE = T

Explanation:
Use P at end of part number for pin contacts in Normal position. Use S at end of part number for socket contacts in Normal position. Use cross reference letters given in chart above for alternate rotations.

38999
SJT I II III

26482
Matrix 2

83723 III
Matrix Pyle

5015
Crimp Rear Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

Circular Connectors – PCB Contacts

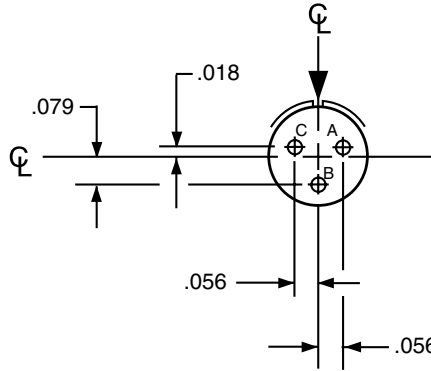
Insert Arrangements



Insert Arrangement #8-3 / 9-3

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	8-3	9-3	NA			

Contact Locations
Front face of pin insert shown

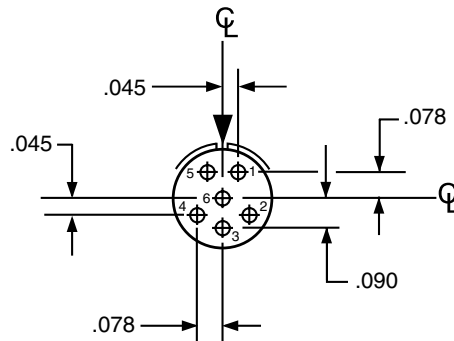


*Service Rating: M for MIL-DTL-38999

Insert Arrangement #8-35 / 9-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	8-35	9-35	9-35			

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others



Circular Connectors – PCB Contacts Insert Arrangements

Insert Arrangement #8-98 / 9-98

Connector Type:

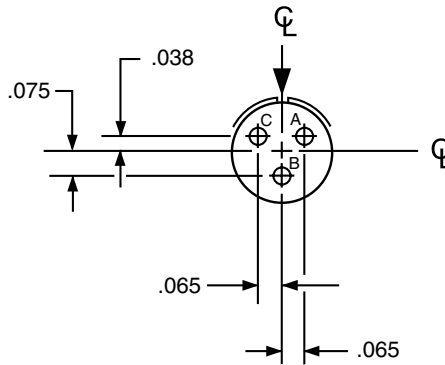
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
8-98	9-98	9-98

Insert Designation:

Number of Contacts	Contact Size	Service Rating
3	20	I

Contact Locations

Front face of pin insert shown



Insert Arrangement #10-5 / 11-5

Connector Type:

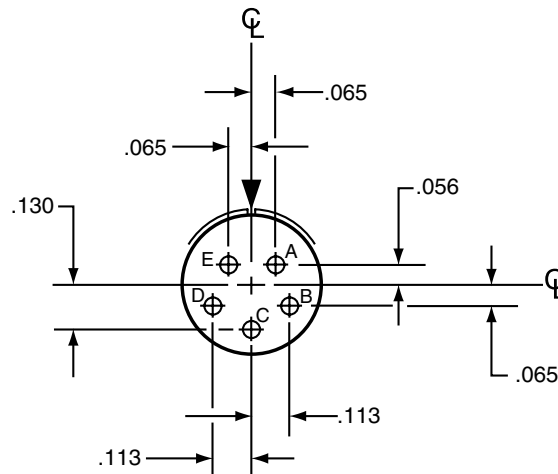
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
10-5	11-5	11-5

Insert Designation:

Number of Contacts	Contact Size	Service Rating
5	20	I

Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.

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Circular Connectors – PCB Contacts Insert Arrangements



Insert Arrangement #10-6 / 11-6

Connector Type:

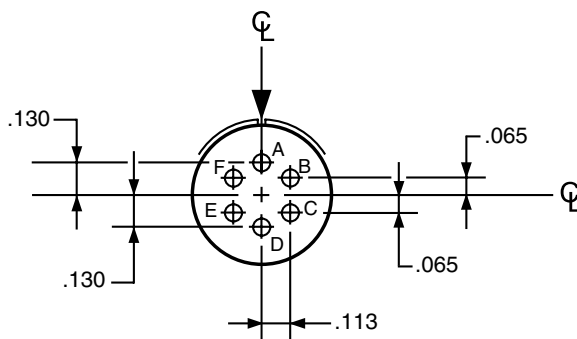
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
NA	11-6	NA

Insert Designation:

Number of Contacts	Contact Size	Service Rating
6	20	I

Contact Locations

Front face of pin insert shown



Insert Arrangement #10-35 / 11-35

Connector Type:

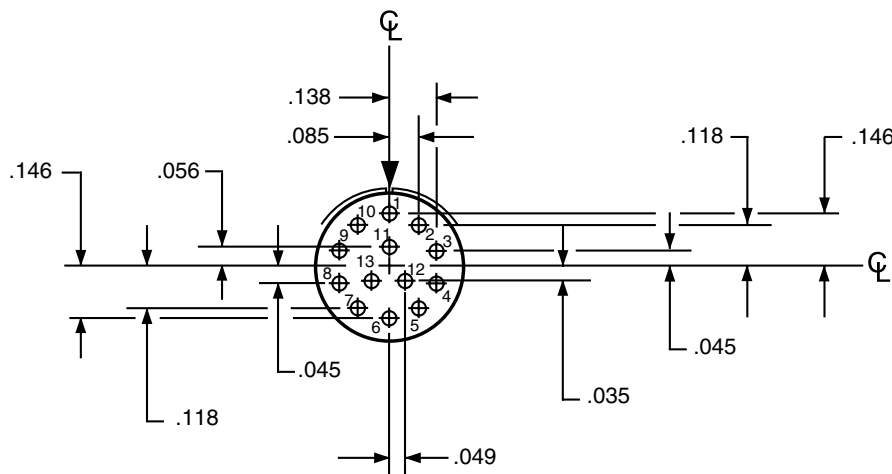
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
10-35	11-35	11-35

Insert Designation:

Number of Contacts	Contact Size	Service Rating
13	22D	M

Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.

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38999
III
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26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others



Circular Connectors – PCB Contacts Insert Arrangements

Insert Arrangement #12-3 / 13-3

Connector Type:

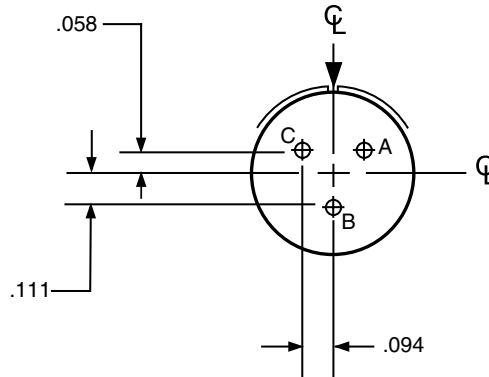
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
12-3	13-3	NA

Number of Contacts	Contact Size	Service Rating
3	16	II

Insert Designation:

Contact Locations

Front face of pin insert shown



Insert Arrangement #12-35 / 13-35

Connector Type:

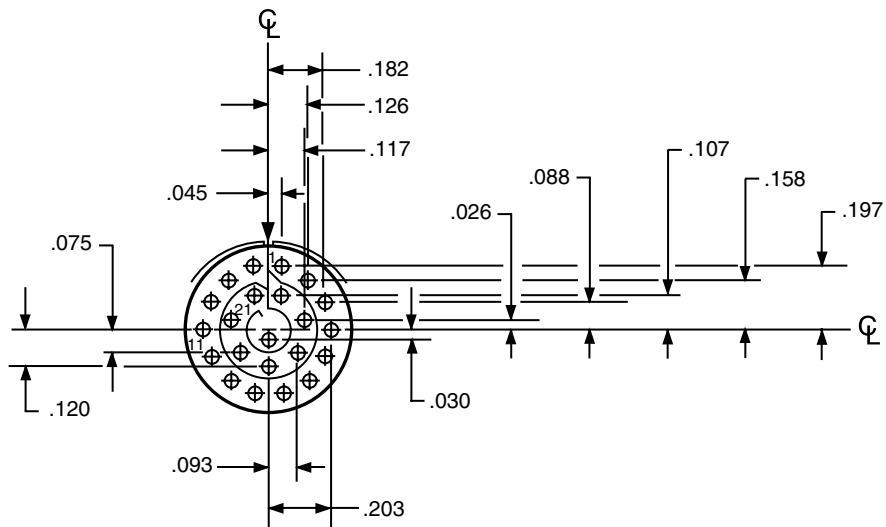
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
12-35	13-35	13-35

Number of Contacts	Contact Size	Service Rating
22	22D	M

Insert Designation:

Contact Locations

Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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Circular Connectors – PCB Contacts

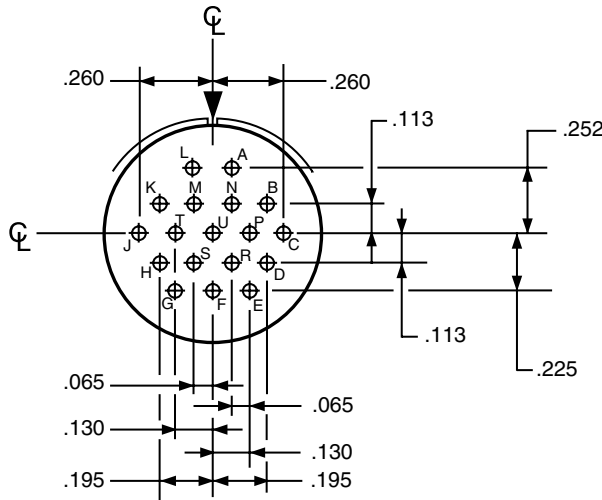
Insert Arrangements



Insert Arrangement #14-18 / 15-18

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	14-18	15-18	15-18	18	20	I

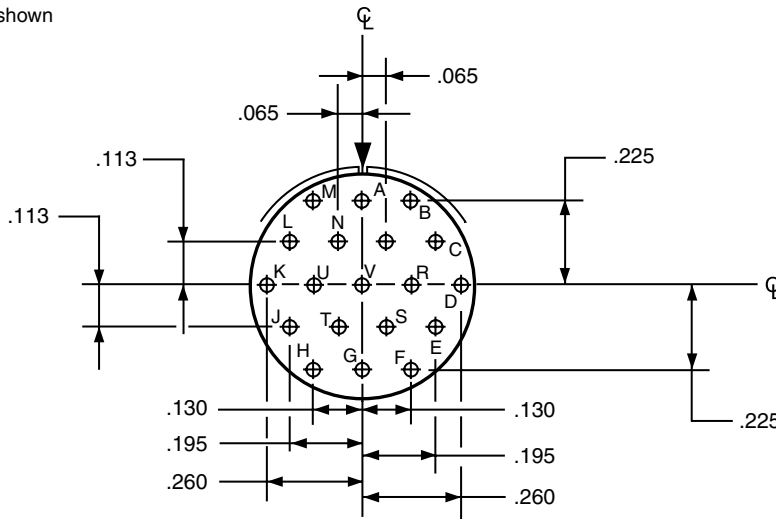
Contact Locations
Front face of pin insert shown



Insert Arrangement #14-19 / 15-19

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	14-19	15-19	15-19	19	20	I

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others



Circular Connectors – PCB Contacts

Insert Arrangements

Insert Arrangement #14-35 / 15-35

Connector Type:

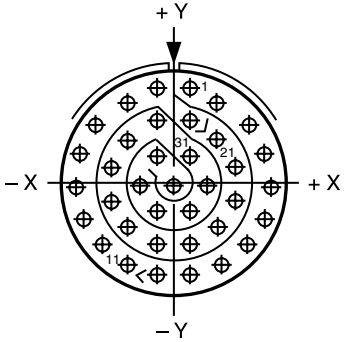
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
14-35	15-35	15-35

Number of Contacts	Contact Size	Service Rating
37	22D	M

Insert Designation:

Contact Locations

Front face of pin insert shown



Contact Number	Location	
	X Axis	Y Axis
1	+045	+262
2	+123	+217
3	+211	+160
4	+254	+080
5	+266	-.010
6	+247	-.098
7	+200	-.175
8	+130	-.232
9	+045	-.262
10	-.045	-.262
11	-.130	-.232
12	-.200	-.175
13	-.247	-.098
14	-.266	-.010
15	-.254	+080
16	-.211	+160
17	-.123	+217
18	-.045	+262
19	+045	+172
20	+123	+119

Contact Number	Location	
	X Axis	Y Axis
21	+170	+040
22	+170	-.050
23	+123	-.127
24	+045	-.172
25	-.045	-.172
26	-.123	-.127
27	-.170	-.050
28	-.170	+040
29	-.123	+119
30	-.045	+172
31	+045	+074
32	+090	-.004
33	+045	-.082
34	-.045	-.082
35	-.090	-.004
36	-.045	+074
37	.000	-.004

Insert Arrangement #16-26 / 17-26

Connector Type:

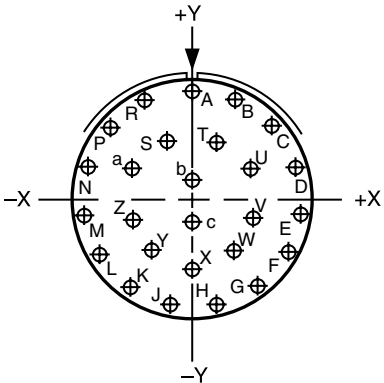
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
NA	17-26	17-26

Number of Contacts	Contact Size	Service Rating
26	20	I

Insert Designation:

Contact Locations

Front face of pin insert shown



Contact Number	Location	
	X Axis	Y Axis
A	.000	+.321
B	+131	+.293
C	+239	+.214
D	+305	+.099
E	+319	-.034
F	+278	-.161
G	+189	-.260
H	+067	-.314
J	-.067	-.314
K	-.189	-.260
L	-.278	-.161
M	-.319	-.034
N	-.305	+.099
P	-.239	+.214

Contact Number	Location	
	X Axis	Y Axis
R	-.131	+.293
S	-.070	+.177
T	+070	+.177
U	+175	+.094
V	+178	-.036
W	+119	-.151
X	.000	-.203
Y	-.119	-.151
Z	-.178	-.036
a	-.175	+.094
b	.000	+.065
c	.000	-.065

All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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Circular Connectors – PCB Contacts

Insert Arrangements



Insert Arrangement #16-35 / 17-35

Connector Type:

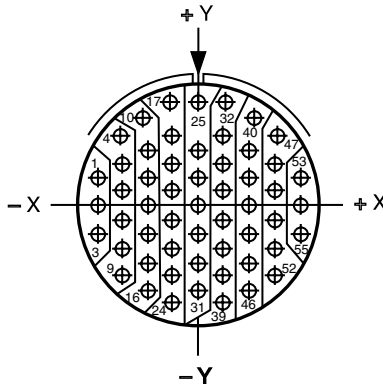
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
16-35	17-35	17-35

Insert Designation:

Number of Contacts	Contact Size	Service Rating
55	22D	M

Contact Locations

Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
1	-.312	+.086
2	-.312	-.004
3	-.312	-.094
4	-.242	+.221
5	-.234	+.131
6	-.234	+.041
7	-.234	-.049
8	-.234	-.139
9	-.234	-.229
10	-.172	+.279
11	-.156	+.176
12	-.156	+.086
13	-.156	-.004
14	-.156	-.094
15	-.156	-.184
16	-.156	-.274
17	-.089	+.316
18	-.078	+.221
19	-.078	+.131
20	-.078	+.041
21	-.078	-.049
22	-.078	-.139
23	-.078	-.229
24	-.078	-.319
25	.000	+.329
26	.000	+.176
27	.000	+.086
28	.000	-.004
29	.000	-.094
30	.000	-.184

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
31	.000	-.274
32	+.089	+.316
33	+.078	+.221
34	+.078	+.131
35	+.078	+.041
36	+.078	-.049
37	+.078	-.139
38	+.078	-.229
39	+.078	-.319
40	+.172	+.279
41	+.156	+.176
42	+.156	+.086
43	+.156	-.004
44	+.156	-.094
45	+.156	-.184
46	+.156	-.274
47	+.242	+.221
48	+.234	+.131
49	+.234	+.041
50	+.234	-.049
51	+.234	-.139
52	+.234	-.229
53	+.312	+.086
54	+.312	-.004
55	+.312	-.094

38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.



Circular Connectors – PCB Contacts Insert Arrangements

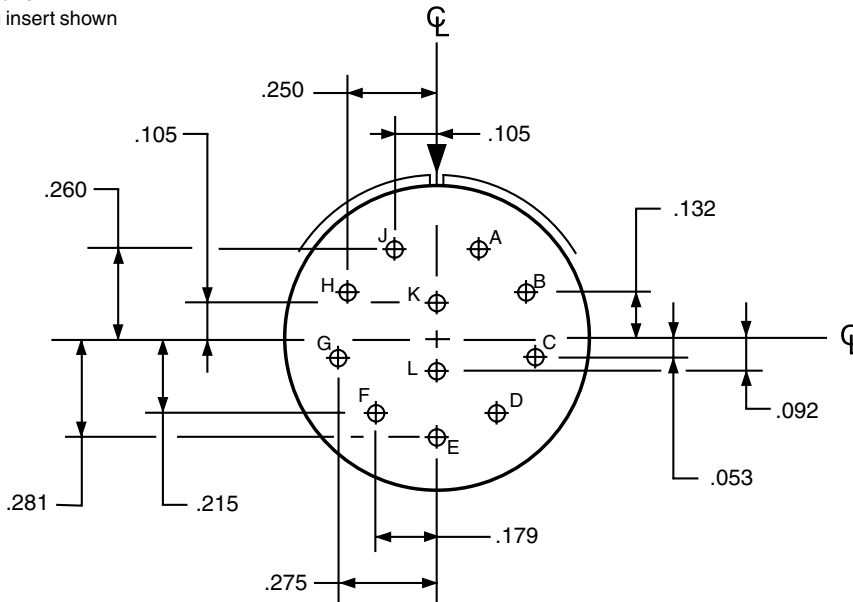
- 38999
SJT I II III
- 26482
Matrix 2
- 83723 III
Matrix Pyle
- 5015
Crimp Rear Release Matrix
- 26500 Pyle

Insert Arrangement #18-11 / 19-11

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	18-11	19-11	19-11

Number of Contacts	Contact Size	Service Rating
11	16	II

Contact Locations
Front face of pin insert shown



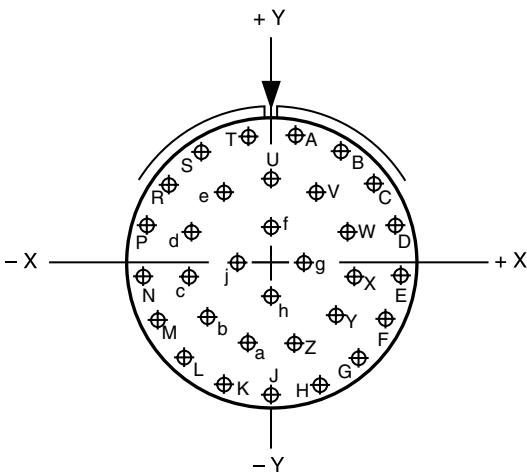
- Printed
Circuit Board
- EMI Filter
Transient
- Fiber Optics
- High Speed
Contacts
- Options
Others

Insert Arrangement #18-32 / 19-32

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
Insert Designation:	18-32	19-32	19-32

Number of Contacts	Contact Size	Service Rating
32	20	I

Contact Locations
Front face of pin insert shown



Contact Letter	Contact Hole Locations	
	X Axis	Y Axis
A	+.066	+.353
B	+.189	+.305
C	+.286	+.217
D	+.345	+.098
E	+.357	-.033
F	+.321	-.160
G	+.242	-.265
H	+.130	-.335
J	.000	-.359
K	-.130	-.335
L	-.242	-.265
M	-.321	-.160
N	-.357	-.033
P	-.345	+.098
R	-.286	+.217
S	-.189	+.305

Contact Letter	Contact Hole Locations	
	X Axis	Y Axis
T	-.066	+.353
U	.000	+.230
V	+.124	+.193
W	+.209	+.095
X	+.228	-.033
Y	+.174	-.151
Z	+.065	-.221
a	-.065	-.221
b	-.174	-.151
c	-.228	-.033
d	-.209	+.095
e	-.124	+.193
f	.000	+.096
g	+.096	.000
h	.000	-.096
j	-.096	.000

All dimensions for reference only. For alternate rotations see page 240.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

Circular Connectors – PCB Contacts

Insert Arrangements

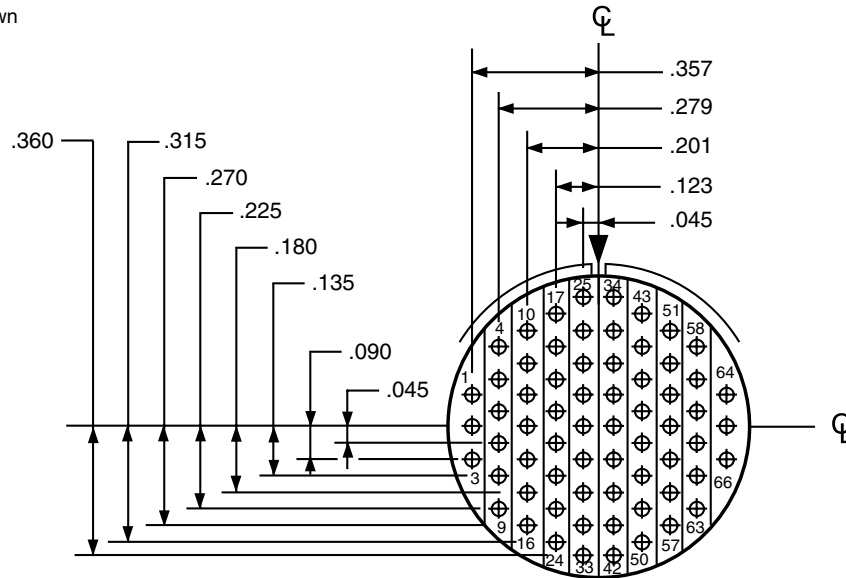


Insert Arrangement #18-35 / 19-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
	18-35	19-35	19-35
Insert Designation:	18-35	19-35	19-35

Number of Contacts	Contact Size	Service Rating
66	22D	M

Contact Locations
Front face of pin insert shown

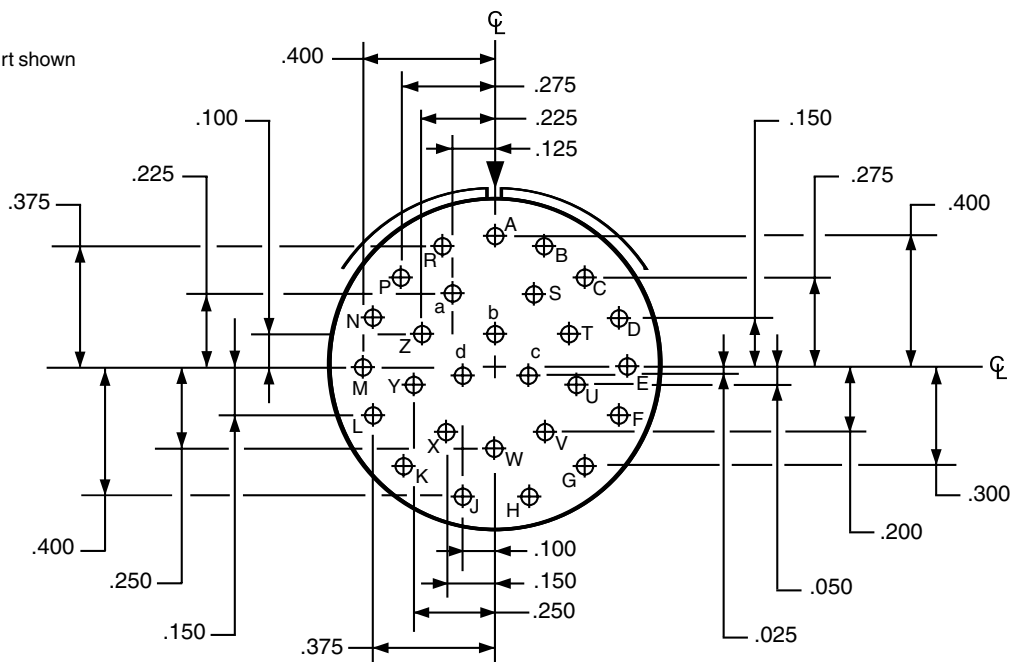


Insert Arrangement #20-27 / 21-27

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
	20-27	21-27	NA
Insert Designation:	20-27	21-27	NA

Number of Contacts	Contact Size	Service Rating
27	20	I

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others



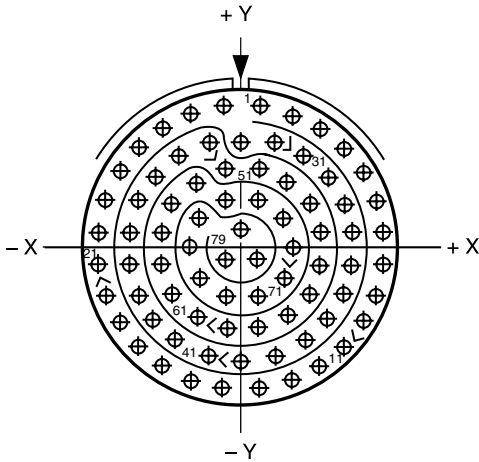
Circular Connectors – PCB Contacts Insert Arrangements

Insert Arrangement #20-35 / 21-35

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
	20-35	21-35	21-35

Number of Contacts	Contact Size	Service Rating
79	22D	M

Contact Locations
Front face of pin insert shown



Contact Number	Location	
	X Axis	Y Axis
10	+0.365	-.227
11	+0.306	-.302
12	+0.232	-.362
13	+0.146	-.404
14	+0.053	-.426
15	-.053	-.426
16	-.146	-.404
17	-.232	-.362
18	-.306	-.302
19	-.365	-.227
20	-.406	-.141
21	-.427	-.048
22	-.427	+0.048
23	-.406	+0.141
24	-.365	+0.227
25	-.306	+0.302
26	-.232	+0.362
27	-.146	+0.404
28	-.053	+0.426
29	.000	+0.323
30	+0.098	+0.322
31	+0.184	+0.280
32	+0.258	+0.220
33	+0.311	+0.141
34	+0.332	+0.048
35	+0.332	-.048
36	+0.311	-.141
37	+0.258	-.220
38	+0.184	-.280
39	+0.098	-.322
40	.000	-.347
41	-.098	-.322
42	-.184	-.280
43	-.258	-.220
44	-.311	-.141

Contact Number	Location	
	X Axis	Y Axis
45	-.332	-.048
46	-.332	+0.048
47	-.311	+0.141
48	-.258	+0.220
49	-.184	+0.280
50	-.098	+0.322
51	-.048	+0.241
52	+0.048	+0.241
53	+0.134	+0.199
54	+0.208	+0.139
55	+0.237	+0.048
56	+0.237	-.048
57	+0.208	-.139
58	+0.134	-.199
59	+0.048	-.241
60	-.048	-.241
61	-.134	-.199
62	-.208	-.139
63	-.237	-.048
64	-.237	+0.048
65	-.208	+0.139
66	-.134	+0.199
67	-.048	+0.146
68	+0.048	+0.146
69	+0.125	+0.090
70	+0.155	.000
71	+0.125	-.090
72	+0.048	-.146
73	-.048	-.146
74	-.125	-.090
75	-.155	.000
76	-.125	+0.090
77	.000	+0.053
78	+0.048	-.029
79	-.048	-.029

Contact Number	Location	
	X Axis	Y Axis
1	+0.053	+0.426
2	+0.146	+0.404
3	+0.232	+0.362
4	+0.306	+0.302
5	+0.365	+0.227
6	+0.406	+0.141
7	+0.427	+0.048
8	+0.427	-.048
9	+0.406	-.141

All dimensions for reference only. For alternate rotations see page 240.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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Circular Connectors – PCB Contacts

Insert Arrangements



Insert Arrangement #20-41 / 21-41

Connector Type:

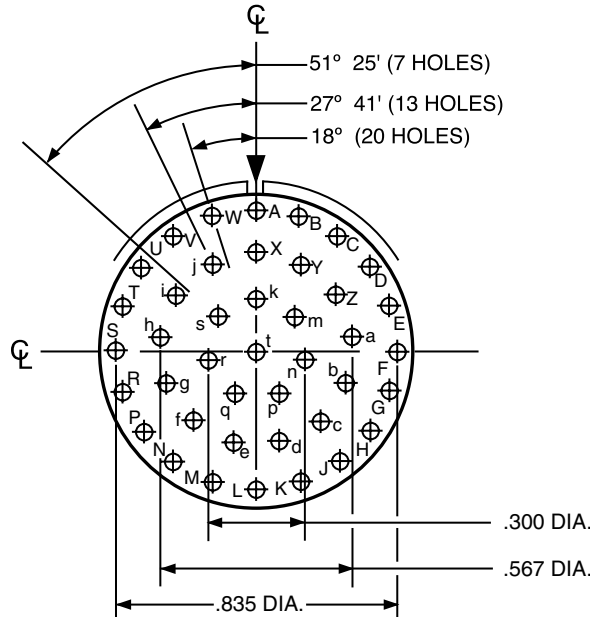
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
20-41	21-41	21-41

Insert Designation:

Number of Contacts	Contact Size	Service Rating
41	20	I

Contact Locations

Front face of pin insert shown



38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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Circular Connectors – PCB Contacts Insert Arrangements

Insert Arrangement #22-35 / 23-35

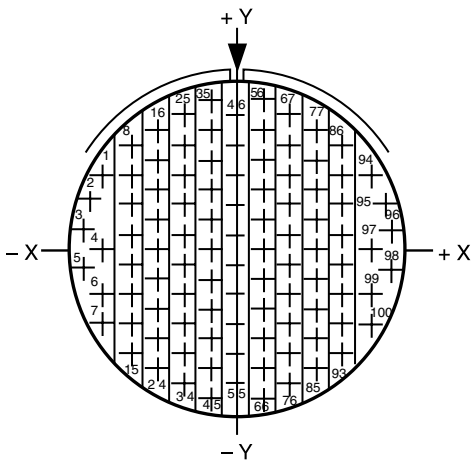
Connector Type:

JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
22-35	23-35	23-35

Insert Designation:

Number of Contacts	Contact Size	Service Rating
100	22D	M

Contact Locations
Front face of pin insert shown



Contact Number	Location	
	X Axis	Y Axis
1	-.428	+.241
2	-.467	+.154
3	-.488	+.061
4	-.415	.000
5	-.488	-.061
6	-.428	-.142
7	-.428	-.237
8	-.332	+.333
9	-.332	+.238
10	-.332	+.143
11	-.332	+.048
12	-.332	-.047
13	-.332	-.142
14	-.332	-.237
15	-.332	-.332
16	-.249	+.380
17	-.249	+.285
18	-.249	+.190
19	-.249	+.095
20	-.249	.000

Contact Number	Location	
	X Axis	Y Axis
21	-.249	-.095
22	-.249	-.190
23	-.249	-.285
24	-.249	-.380
25	-.166	+.428
26	-.166	+.333
27	-.166	+.238
28	-.166	+.143
29	-.166	+.048
30	-.166	-.047
31	-.166	-.142
32	-.166	-.237
33	-.166	-.332
34	-.166	-.427
35	-.083	+.475
36	-.083	+.380
37	-.083	+.285
38	-.083	+.190
39	-.083	+.095
40	-.083	.000
41	-.083	-.095
42	-.083	-.190
43	-.083	-.285
44	-.083	-.380
45	-.083	-.475
46	.000	+.428
47	.000	+.333
48	.000	+.238
49	.000	+.143
50	.000	+.048
51	.000	-.047
52	.000	-.142
53	.000	-.237
54	.000	-.332
55	.000	-.427
56	+.083	+.475
57	+.083	+.380
58	+.083	+.285
59	+.083	+.190
60	+.083	+.095

Contact Number	Location	
	X Axis	Y Axis
61	+.083	.000
62	+.083	-.095
63	+.083	-.190
64	+.083	-.285
65	+.083	-.380
66	+.083	-.475
67	+.166	+.428
68	+.166	+.333
69	+.166	+.238
70	+.166	+.143
71	+.166	+.048
72	+.166	-.047
73	+.166	-.142
74	+.166	-.237
75	+.166	-.332
76	+.166	-.427
77	+.249	+.380
78	+.249	+.285
79	+.249	+.190
80	+.249	+.095
81	+.249	.000
82	+.249	-.095
83	+.249	-.190
84	+.249	-.285
85	+.249	-.380
86	+.332	+.333
87	+.332	+.238
88	+.332	+.143
89	+.332	+.048
90	+.332	-.047
91	+.332	-.142
92	+.332	-.237
93	+.332	-.332
94	+.428	+.241
95	+.467	+.154
96	+.488	+.061
97	+.415	.000
98	+.488	-.061
99	+.428	-.142
100	+.428	-.237

All dimensions for reference only. For alternate rotations see page 240.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

38999
SJT I II III

26482
Matrix 2

83723 III
Matrix Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

Circular Connectors – PCB Contacts

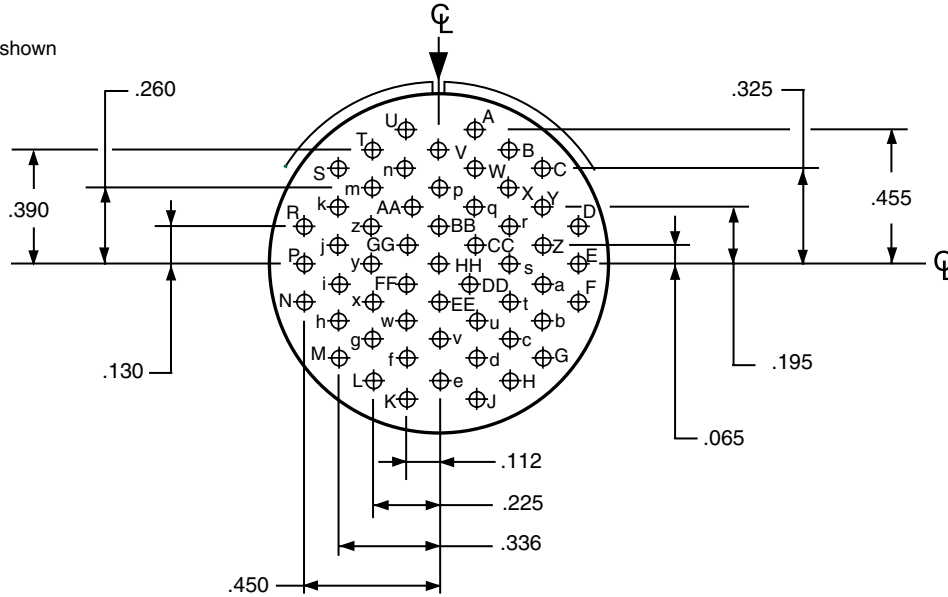
Insert Arrangements



Insert Arrangement #22-55 / 23-55

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	22-55	23-55	23-55			

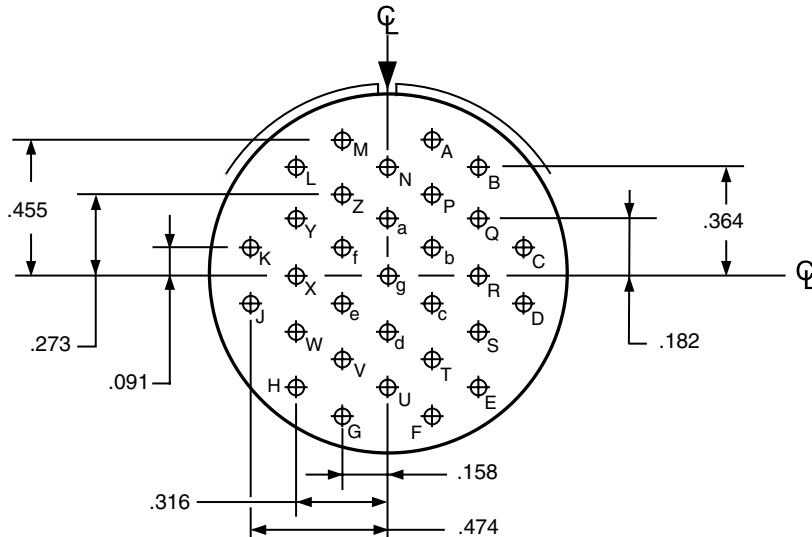
Contact Locations
Front face of pin insert shown



Insert Arrangement #24-31 / 25-31

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III	Number of Contacts	Contact Size	Service Rating
	24-31	NA	NA			

Contact Locations
Front face of pin insert shown



All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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- III 38999
- II
- I
- SJT
- 26482 Matrix 2
- 83723 III Matrix Pyle
- 5015 Crimp Rear Release Matrix
- 26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others



Circular Connectors – PCB Contacts Insert Arrangements

Insert Arrangement #24-35 / 25-35

Connector Type:

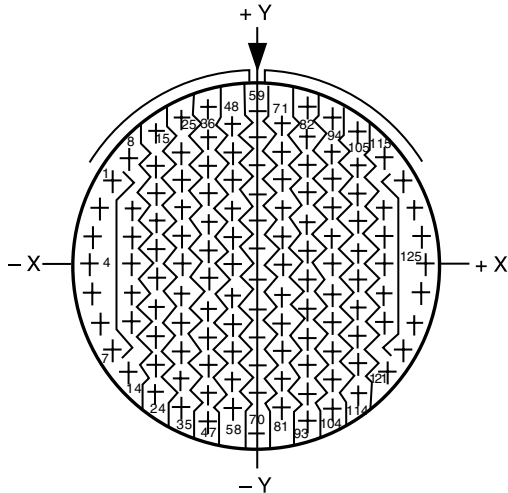
JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
24-35	25-35	25-35

Insert Designation:

Number of Contacts	Contact Size	Service Rating
128	22D	M

Contact Locations

Front face of pin insert shown



Contact Number	Location	
	X Axis	Y Axis
1	-.479	+.279
2	-.520	+.190
3	-.546	+.095
4	-.555	.000
5	-.546	-.095
6	-.520	-.190
7	-.479	-.279
8	-.424	+.357
9	-.415	+.190
10	-.415	+.095
11	-.415	.000
12	-.415	-.095
13	-.415	-.190
14	-.424	-.357
15	-.332	+.444
16	-.332	+.332
17	-.332	+.237
18	-.332	+.142
19	-.332	+.047
20	-.332	-.047
21	-.332	-.142
22	-.332	-.237
23	-.332	-.332
24	-.332	-.427
25	-.249	+.496
26	-.249	+.380
27	-.249	+.285
28	-.249	+.190

Contact Number	Location	
	X Axis	Y Axis
29	-.249	+.095
30	-.249	.000
31	-.249	-.095
32	-.249	-.190
33	-.249	-.285
34	-.249	-.380
35	-.249	-.475
36	-.160	+.531
37	-.166	+.427
38	-.166	+.332
39	-.166	+.237
40	-.166	+.142
41	-.166	+.047
42	-.166	-.047
43	-.166	-.142
44	-.166	-.237
45	-.166	-.332
46	-.166	-.427
47	-.166	-.522
48	-.083	+.475
49	-.083	+.380
50	-.083	+.285
51	-.083	+.190
52	-.083	+.095
53	-.083	.000
54	-.083	-.095
55	-.083	-.190
56	-.083	-.285
57	-.083	-.380
58	-.083	-.475
59	.000	+.522
60	.000	+.427
61	.000	+.332
62	.000	+.237
63	.000	+.142
64	.000	+.047
65	.000	-.047
66	.000	-.142
67	.000	-.237
68	.000	-.332
69	.000	-.427
70	.000	-.555
71	+.083	+.475
72	+.083	+.380
73	+.083	+.285
74	+.083	+.190
75	+.083	+.095
76	+.083	.000
77	+.083	-.095
78	+.083	-.190

Contact Number	Location	
	X Axis	Y Axis
79	+.083	-.285
80	+.083	-.380
81	+.083	-.475
82	+.160	+.531
83	+.166	+.427
84	+.166	+.332
85	+.166	+.237
86	+.166	+.142
87	+.166	+.047
88	+.166	-.047
89	+.166	-.142
90	+.166	-.237
91	+.166	-.332
92	+.166	-.427
93	+.166	-.522
94	+.249	+.496
95	+.249	+.380
96	+.249	+.285
97	+.249	+.190
98	+.249	+.095
99	+.249	.000
100	+.249	-.095
101	+.249	-.190
102	+.249	-.285
103	+.249	-.380
104	+.249	-.475
105	+.332	+.444
106	+.332	+.332
107	+.332	+.237
108	+.332	+.142
109	+.332	+.047
110	+.332	-.047
111	+.332	-.142
112	+.332	-.237
113	+.332	-.332
114	+.332	-.427
115	+.424	+.357
116	+.415	+.190
117	+.415	+.095
118	+.415	.000
119	+.415	-.095
120	+.415	-.190
121	+.424	-.357
122	+.479	+.279
123	+.520	+.190
124	+.546	+.095
125	+.555	.000
126	+.546	-.095
127	+.520	-.190
128	+.479	-.279

All dimensions for reference only. For alternate rotations see page 240.

Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.

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38999
SJT I II III

26482
Matrix 2

83723 III
Matrix Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

Circular Connectors – PCB Contacts

Insert Arrangements

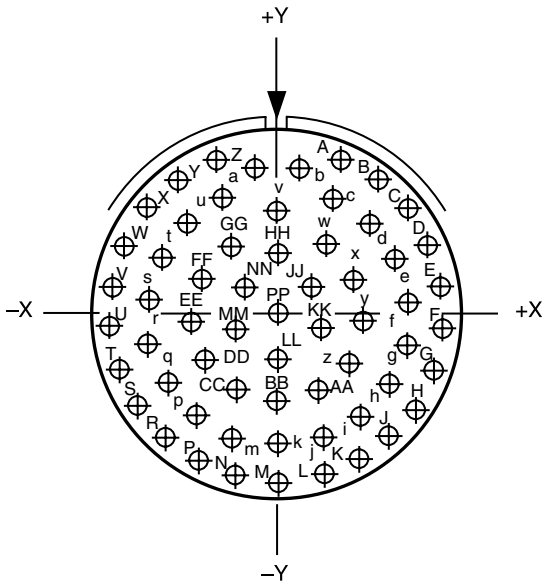


Insert Arrangement #24-61 / 25-61

Connector Type:	JT MIL-DTL-38999 Series II	LJT MIL-DTL-38999 Series I	Tri-Start MIL-DTL-38999 Series III
	24-61	25-61	25-61

Number of Contacts	Contact Size	Service Rating
61	20	I

Contact Locations
Front face of pin insert shown



Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
A	+ .196	+ .500
B	+ .314	+ .435
C	+ .413	+ .343
D	+ .485	+ .230
E	+ .527	+ .101
F	+ .536	- .030
G	+ .511	- .164
H	+ .454	- .287
J	+ .368	- .391
K	+ .259	- .470
L	+ .134	- .519
M	.000	- .537
N	- .134	- .519
P	- .259	- .470
R	- .368	- .391
S	- .454	- .287
T	- .511	- .164
U	- .536	- .030
V	- .527	+ .101
W	- .485	+ .230
X	- .413	+ .343
Y	- .314	+ .435
Z	- .196	+ .500
a	- .068	+ .454
b	+ .068	+ .454
c	+ .173	+ .363
d	+ .285	+ .283
e	+ .362	+ .175
f	+ .399	+ .046

Contact Hole Locations		
Contact Number	Location	
	X Axis	Y Axis
g	+ .392	- .088
h	+ .341	- .213
i	+ .251	- .314
j	+ .133	- .379
k	.000	- .402
m	- .133	- .379
n	- .251	- .314
p	- .341	- .213
q	- .392	- .088
r	- .399	+ .046
s	- .362	+ .175
t	- .285	+ .283
u	- .173	+ .363
v	.000	+ .338
w	+ .147	+ .223
x	+ .237	+ .122
y	+ .267	- .010
z	+ .228	- .139
AA	+ .131	- .233
BB	.000	- .267
CC	- .131	- .233
DD	- .228	- .139
EE	- .267	- .010
FF	- .237	+ .122
GG	- .147	+ .223
HH	.000	+ .200
JJ	+ .105	+ .094
KK	+ .135	- .041
LL	.000	- .132
MM	- .135	- .041
NN	- .105	+ .094
PP	.000	.000

38999
III
II
I
SJT

26482
Matrix 2

83723 III
Matrix
Pyle

5015
Crimp Rear
Release Matrix

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

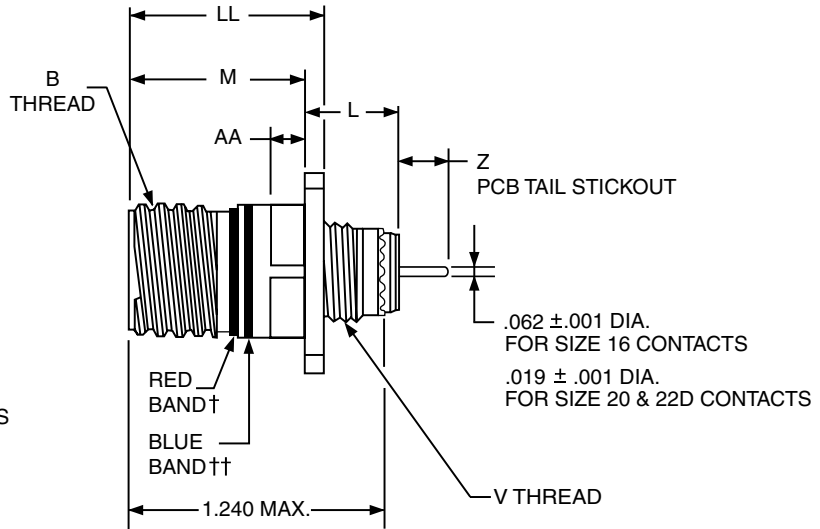
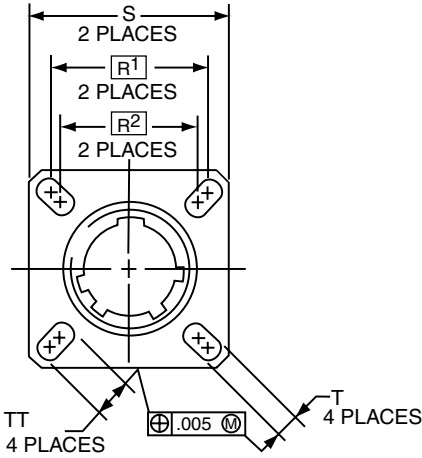
Options
Others

All dimensions for reference only. For alternate rotations see page 240.
Note: Shown in this catalog are the most common insert patterns for PCB applications. For availability of other arrangements, consult Powell Electronics.



38999, Series III with PCB Contacts TVP00R Wall Mounting Receptacle (Back Panel Mounting)

Series III TV



1. 2. 3. 4. 5.

PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	76X	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

2. Base Number:

569	Base Number
-----	-------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

3. Select a Coded Shell Size:

See chart below 761-769, designates size 9-25 shell size.
Example: 761= Size 9 Shell

Shell Size	Part Number	BThread Class 2A (Plated) 0.1P-0.3L-TS	L Max.	M +.000 - .005	R ¹	R ²	S Max.	T +.008 - .006	V Thread Metric	AA Max. Panel Thickness	LL +.006 - .000	TT +.008 - .006	Z	
													Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-569761-XXX	.6250	.469	.820	.719	.594	.948	.128	M12X1-6g	.234	.905	.216	.228-.178	.242-.181
11	762-XXX	.7500	.469	.820	.812	.719	1.043	.128	M15X1-6g	.234	.905	.194	.228-.178	.242-.181
13	763-XXX	.8750	.469	.820	.906	.812	1.137	.128	M18X1-6g	.234	.905	.194	.228-.178	.242-.181
15	764-XXX	1.0000	.469	.820	.969	.906	1.232	.128	M22X1-6g	.234	.905	.173	.228-.178	.242-.181
17	765-XXX	1.1875	.469	.820	1.062	.969	1.323	.128	M25X1-6g	.234	.905	.194	.228-.178	.242-.181
19	766-XXX	1.2500	.469	.820	1.156	1.062	1.449	.128	M28X1-6g	.234	.905	.194	.228-.178	.242-.181
21	767-XXX	1.3750	.500	.790	1.250	1.156	1.575	.128	M31X1-6g	.204	.905	.194	.228-.178	.242-.181
23	768-XXX	1.5000	.500	.790	1.375	1.250	1.701	.154	M34X1-6g	.204	.905	.242	.228-.178	.242-.181
25	769-XXX	1.6250	.500	.790	1.500	1.375	1.823	.154	M37X1-6g	.204	.905	.242	.228-.178	.242-.181

All dimensions for reference only.

Composite Series III connectors with PBC Contacts are available; consult Powell Electronics.

Z dimension is determined by contact type in the insert arrangement.

Most common options are shown; other options are available.

□ Designates true position dimensioning

† Red band indicates fully mated

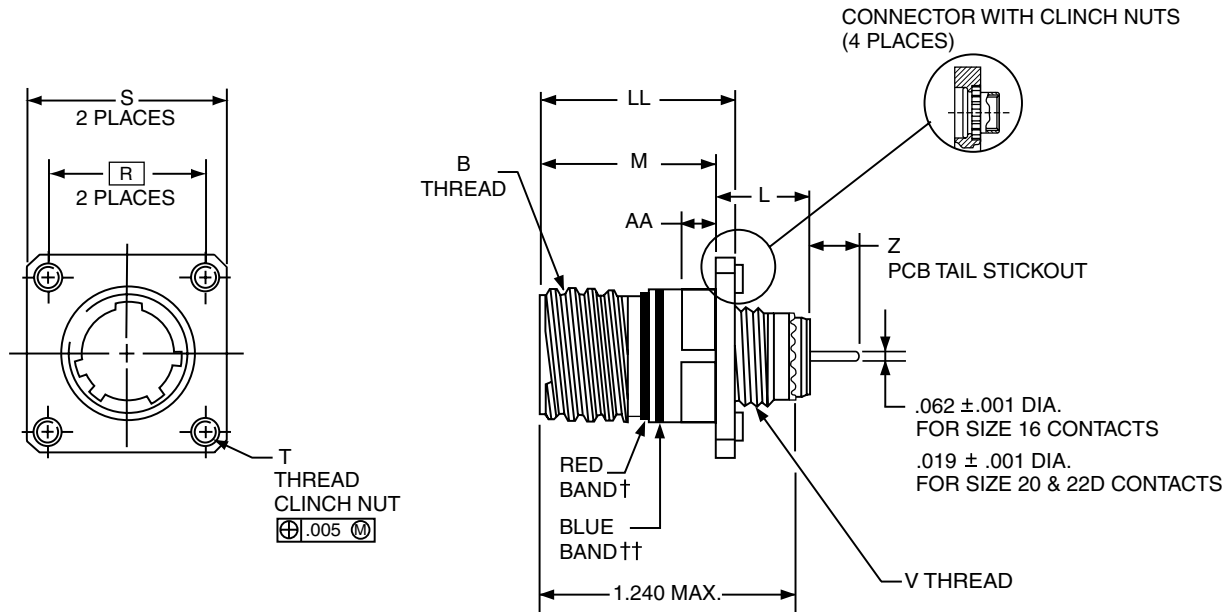
†† Blue band indicates rear release contact retention system

38999, Series III with PCB Contacts TVP00R Wall Mounting Receptacle

(Back Panel Mounting) (With Clinch Nuts)



Series III TV



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	628	74	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

628	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 741-749, designates size 9-25 shell size.
Example: 741= Size 9 Shell

Shell Size	Part Number with Clinch Nuts*	BThread Class 2A (Plated) 0.1P-0.3L-TS	L Max.	M +.000 - .005	R	S Max.	T Thread	V Thread Metric	AA Max. Panel Thickness	LL +.006 - .000	Z	
											Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-628741-XXX	.6250	.469	.820	.719	1.094	.112-40UNC-3B	M12X1-6g	.234	.905	.228-.178	.242-.181
11	742-XXX	.7500	.469	.820	.812	1.187	.112-40UNC-3B	M15X1-6g	.234	.905	.228-.178	.242-.181
13	743-XXX	.8750	.469	.820	.906	1.281	.112-40UNC-3B	M18X1-6g	.234	.905	.228-.178	.242-.181
15	744-XXX	1.0000	.469	.820	.969	1.344	.112-40UNC-3B	M22X1-6g	.234	.905	.228-.178	.242-.181
17	745-XXX	1.1875	.469	.820	1.062	1.437	.112-40UNC-3B	M25X1-6g	.234	.905	.228-.178	.242-.181
19	746-XXX	1.2500	.469	.820	1.156	1.531	.112-40UNC-3B	M28X1-6g	.234	.905	.228-.178	.242-.181
21	747-XXX	1.3750	.500	.790	1.250	1.625	.112-40UNC-3B	M31X1-6g	.204	.905	.228-.178	.242-.181
23	748-XXX	1.5000	.500	.790	1.375	1.750	.138-32UNC-3B	M34X1-6g	.204	.905	.228-.178	.242-.181
25	749-XXX	1.6250	.500	.790	1.500	1.875	.138-32UNC-3B	M37X1-6g	.204	.905	.228-.178	.242-.181

All dimensions for reference only.

*Consult Powell for more information on ordering connectors with clinch nuts.

Composite Series III connectors with PBC Contacts are available; consult Powell Electronics.

Z dimension is determined by contact type in the insert arrangement.

Most common options are shown; other options are available.

Designates true position dimensioning

† Red band indicates fully mated

†† Blue band indicates rear release contact retention system

III
II
I
SJT
38999

Matrix 2
26482

Matrix Pyle
83723 III

Release Matrix
5015
Crimp Rear

26500 Pyle

Printed
Circuit Board

EM1 Filter
Transient

Fiber Optics

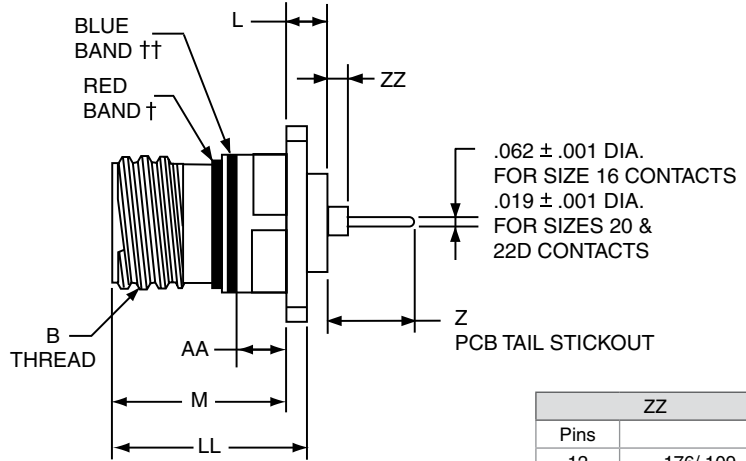
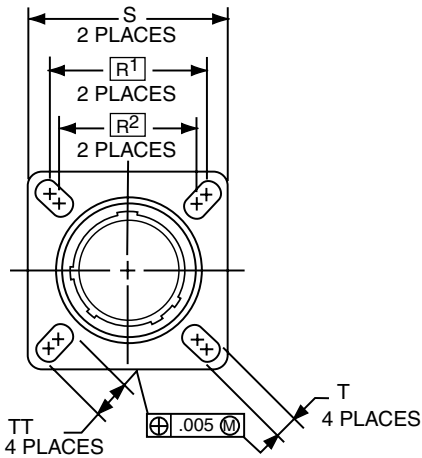
High Speed
Contacts

Options
Others



38999, Series III with PCB Contacts TVP02R Box Mounting Receptacle

Series III TV



ZZ	
Pins	
12	.176/.109
16	.044/-.013
20	.161/.094
22D	.092/.025
Sockets	
12	.176/.109
16	.092/.035
20	.161/.094
22D	.159/.088

PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	771	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 771-779, designates size 9-25 shell size.
Example: 771= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

Shell Size	Part Number	BThread Class 2A (Plated) 0.1P-0.3L-TS	L Max.	M +.000 - .005	R ¹	R ²	S Max.	T +.008 - .006	AA Max. Panel Thickness	LL +.006 - .000	TT +.008 - .006	Z	
												Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-569771-XXX	.6250	.205	.820	.719	.594	.948	.128	.234	.905	.216	.460-.375	.471-.399
11	772-XXX	.7500	.205	.820	.812	.719	1.043	.128	.234	.905	.194	.460-.375	.471-.399
13	773-XXX	.8750	.205	.820	.906	.812	1.137	.128	.234	.905	.194	.460-.375	.471-.399
15	774-XXX	1.0000	.205	.820	.969	.906	1.232	.128	.234	.905	.173	.460-.375	.471-.399
17	775-XXX	1.1875	.205	.820	1.062	.969	1.323	.128	.234	.905	.194	.460-.375	.471-.399
19	776-XXX	1.2500	.205	.820	1.156	1.062	1.449	.128	.234	.905	.194	.460-.375	.471-.399
21	777-XXX	1.3750	.235	.790	1.250	1.156	1.575	.128	.204	.905	.194	.460-.375	.471-.399
23	778-XXX	1.5000	.235	.790	1.375	1.250	1.701	.154	.204	.905	.242	.460-.375	.471-.399
25	779-XXX	1.6250	.235	.790	1.500	1.375	1.823	.154	.204	.905	.242	.460-.375	.471-.399

All dimensions for reference only.

Composite Series III connectors with PBC Contacts are available; consult Powell Electronics.
Z dimension is determined by contact type in the insert arrangement.

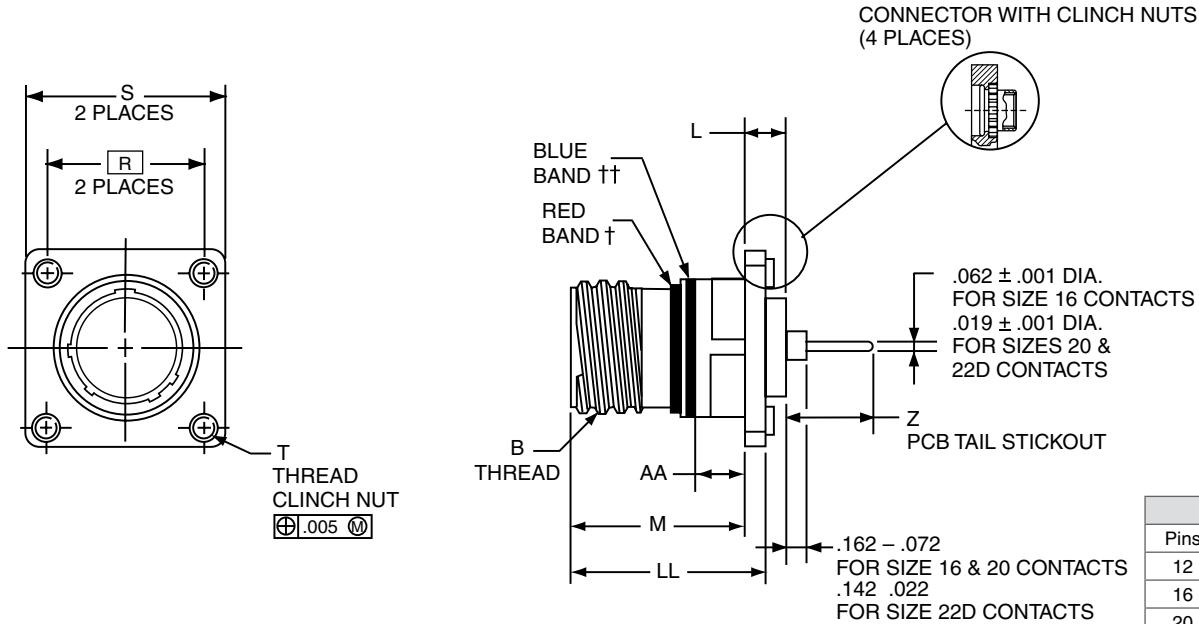
Most common options are shown; other options are available.

☐ Designates true position dimensioning
† Red band indicates fully mated
†† Blue band indicates rear release contact retention system

38999, Series III with PCB Contacts TVP02R Box Mounting Receptacle (With Clinch Nuts)



Series III TV



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	628	75	-35	P

ZZ	
Pins	
12	.176/.109
16	.044/-.013
20	.161/.094
22D	.092/.025
Socket	
12	.176/.109
16	.092/.035
20	.161/.094
22D	.159/.088

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

628	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 751-759, designates size 9-25 shell size.
Example: 751= Size 9 Shell

Shell Size	Part Number with Clinch Nuts*	B Thread Class 2A (Plated) 0.1P-0.3L-TS	L Max.	M +.000 - .005	R	S Max.	T Thread	AA Max. Panel Thickness	LL +.006 - .000	Z	
										Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-628751-XXX	.6250	.205	.820	.719	1.031	.112-40UNC-3B	.234	.905	.460-.375	.471-.399
11	752-XXX	.7500	.205	.820	.812	1.125	.112-40UNC-3B	.234	.905	.460-.375	.471-.399
13	753-XXX	.8750	.205	.820	.906	1.172	.112-40UNC-3B	.234	.905	.460-.375	.471-.399
15	754-XXX	1.0000	.205	.820	.969	1.281	.112-40UNC-3B	.234	.905	.460-.375	.471-.399
17	755-XXX	1.1875	.205	.820	1.062	1.375	.112-40UNC-3B	.234	.905	.460-.375	.471-.399
19	756-XXX	1.2500	.205	.820	1.156	1.469	.112-40UNC-3B	.234	.905	.460-.375	.471-.399
21	757-XXX	1.3750	.235	.790	1.250	1.562	.112-40UNC-3B	.204	.905	.460-.375	.471-.399
23	758-XXX	1.5000	.235	.790	1.375	1.750	.112-40UNC-3B	.204	.905	.460-.375	.471-.399
25	759-XXX	1.6250	.235	.790	1.500	1.875	.112-40UNC-3B	.204	.905	.460-.375	.471-.399

All dimensions for reference only.

* Consult Powell for more information on ordering connectors with clinch nuts.

Composite Series III connectors with PCB Contacts are available; consult Powell Electronics.

• Z dimension is determined by contact type in the insert arrangement.

• Most common options are shown; other options are available.

□ Designates true position dimensioning

† Red band indicates fully mated

†† Blue band indicates rear release contact retention system

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

III
II
I
SJT
38999

Matrix 2
26482

Matrix Pyle
83723 III

Release Matrix
5015
Crimp Rear

Pyle
26500

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

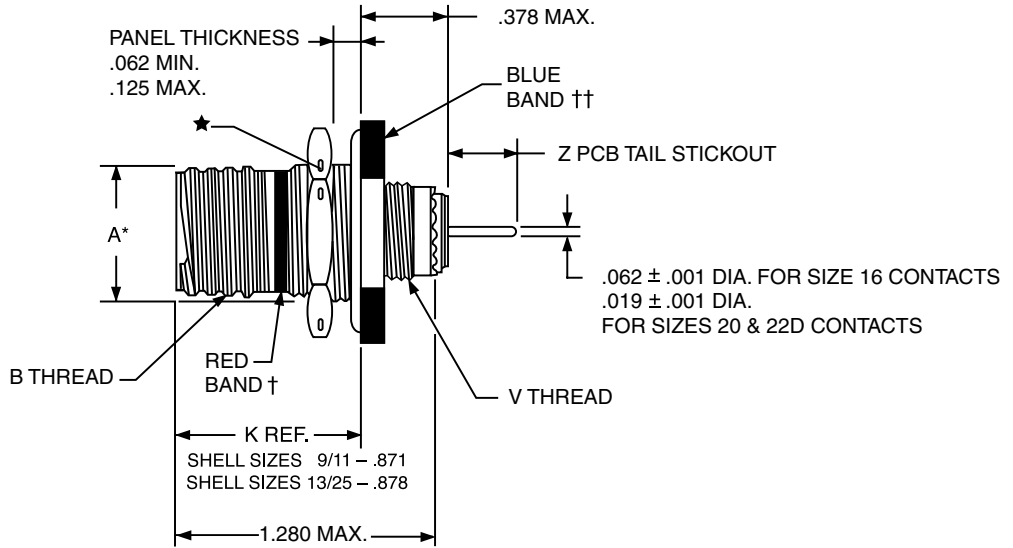
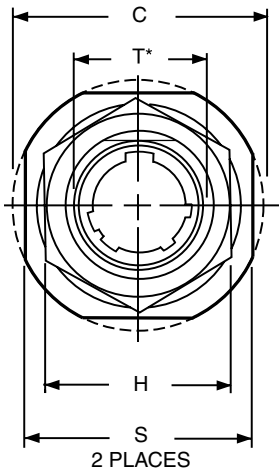
High Speed
Contacts

Options
Others



38999, Series III with PCB Contacts TV07R Jam Nut Receptacle

Series III TV



- 1.
- 2.
- 3.
- 4.
- 5.

PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	781	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below **781-789**, designates size 9-25 shell size.
Example: **781**= Size 9 Shell

Shell Size	Part Number	A* +.000 -.010	B Thread Class 2A (Plated) 0.1P-0.3L-TS	C Max.	H Hex +.017 -.016	S ±.010	T +.010 -.000	V Thread Metric	Z	
									Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-569 781 -XXX	.669	.6250	1.199	.875	1.062	.697	M12X1-6g	.244 - .200	.258 - .206
11	782 -XXX	.769	.7500	1.386	1.000	1.250	.822	M15X1-6g	.244 - .200	.258 - .206
13	783 -XXX	.955	.8750	1.511	1.188	1.375	1.007	M18X1-6g	.244 - .200	.258 - .206
15	784 -XXX	1.084	1.0000	1.636	1.312	1.500	1.134	M22X1-6g	.244 - .200	.258 - .206
17	785 -XXX	1.208	1.1875	1.761	1.438	1.625	1.259	M25X1-6g	.244 - .200	.258 - .206
19	786 -XXX	1.333	1.2500	1.949	1.562	1.812	1.384	M28X1-6g	.222 - .177	.236 - .180
21	787 -XXX	1.459	1.3750	2.073	1.688	1.938	1.507	M31X1-6g	.222 - .177	.236 - .180
23	788 -XXX	1.575	1.5000	2.199	1.812	2.062	1.634	M34X1-6g	.222 - .177	.236 - .180
25	789 -XXX	1.709	1.6250	2.323	2.000	2.188	1.759	M37X1-6g	.222 - .177	.236 - .180

All dimensions for reference only.
Composite Series III connectors with PBC Contacts are available; consult Powell Electronics.
Z dimension is determined by contact type in the insert arrangement.
Most common options are shown; other options are available.

† Red band indicates fully mated
†† Blue band indicates rear release contact retention system
★ .059 dia. min. 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.
*“D” shaped mounting hole dimensions

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

Options
Others

38999
SJT I II III

26482
Matrix 2

83723 III
Matrix Pyle

5015
Crimp Rear
Release Matrix

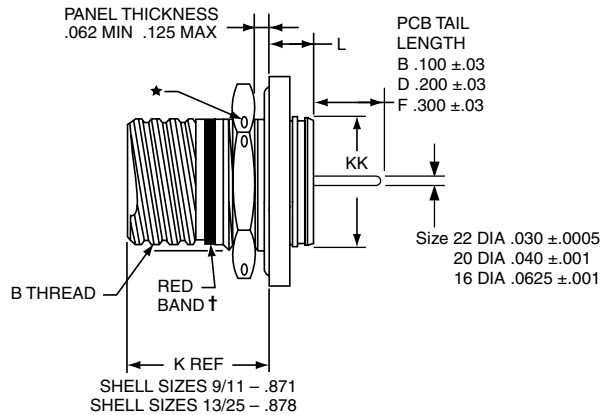
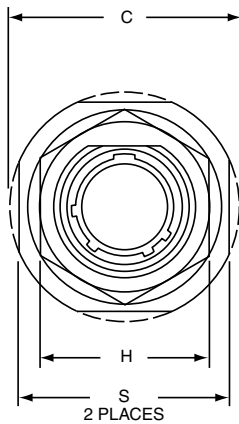
26500 Pyle

38999, Series III Hermetic - PCB Contacts

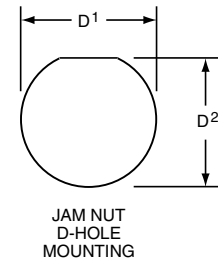
TVS07Y Jam Nut Receptacle



Series III TV



PANEL HOLE DIMENSIONS



- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

PART #	Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying Positions	Shell Finish	Tail Length
See chart below	10-626	471	-35	P	1	B

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail
--------	---

2. Select a Coded Shell Size:

See chart below 471-479, designates size 9-25 shell size

3. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

4. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate

6. Select a Tail Length:

B	.100±.03
D	.200±.03
F	.300±.03

† Red band indicates fully mated

★ .059 dia min.

1.5 dia min.

3 lockwire holes

Formed lockwire hole design (6 holes) is optional.

Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L-TS (Plated)	C Max	D1 +.010 -0.000	D2 +.000 -0.010	H Hex +.017 -0.016	L Max	S ±.010	KK +.011 -0.000
9	10-626471-XXX	.6250	1.199	.700	.670	.875	.357	1.062	.642
11	472-XXX	.7500	1.386	.825	.770	1.000	.357	1.250	.766
13	473-XXX	.8750	1.511	1.010	.955	1.188	.357	1.375	.892
15	474-XXX	1.0000	1.636	1.135	1.085	1.312	.357	1.500	1.018
17	475-XXX	1.1875	1.761	1.260	1.210	1.438	.357	1.625	1.142
19	476-XXX	1.2500	1.949	1.385	1.335	1.562	.381	1.812	1.268
21	477-XXX	1.3750	2.073	1.510	1.460	1.688	.381	1.938	1.392
23	478-XXX	1.5000	2.199	1.635	1.585	1.812	.381	2.062	1.518
25	479-XXX	1.6250	2.323	1.760	1.710	2.000	.381	2.188	1.642

All dimensions for reference only.

III
II
I
SJT
38999

Matrix 2
26482

Matrix
Pyle
83723 III

Release Matrix
Crimp Rear
5015

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

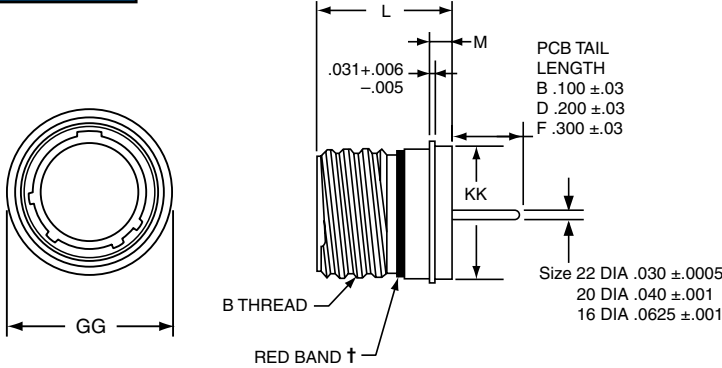
Options
Others



38999, Series III Hermetic with PCB Contacts TVSIY Stainless Steel

Solder Mounting Receptacle

Series III TV



PART

See chart below

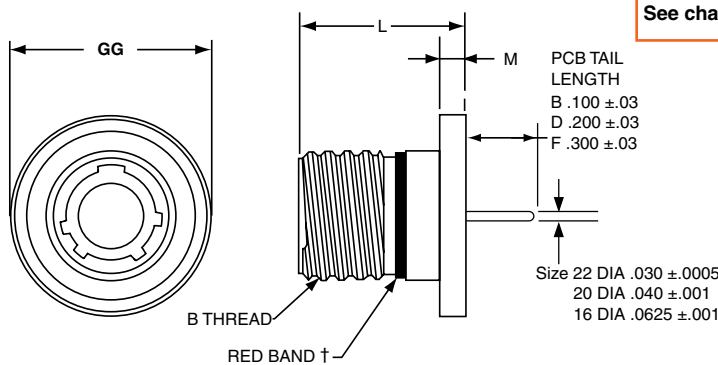
1. Base Number	2. Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
10-626	481	-35	P	1	B

Follow HOW TO ORDER instructions below.

† Red band indicates fully mated

Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 - .005	M +.006 - .005	GG Dia. +.011 - .010	KK Dia +.011 - .005
9	10-626481-XXX	.6250	.806	.125	.750	.672
11	482-XXX	.7500	.806	.125	.844	.781
13	483-XXX	.8750	.806	.125	.969	.906
15	484-XXX	1.0000	.806	.125	1.094	1.031
17	485-XXX	1.1875	.806	.125	1.218	1.156
19	486-XXX	1.2500	.806	.125	1.312	1.250
21	487-XXX	1.3750	.806	.125	1.438	1.375
23	488-XXX	1.5000	.838	.156	1.563	1.500
25	489-XXX	1.6250	.838	.156	1.688	1.625

38999, Series III Hermetic, Stainless Steel - PCB Contacts TVSHIY Weld Mounting Receptacle



PART

See chart below

1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
10-626	491	-35	P	1	B

HOW TO ORDER

1. Base Number:

10-626 Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below 491-499, designates size 9-25 shell size

3. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrg.

-35 Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P Designates Pin Contacts in Normal Position

S Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1 Hermetic seal, passivated Stainless Steel, 200°C

2 *Hermetic seal, Stainless Steel w/Nickel Plate

6. Select a Tail Length:

B .100±.03

D .200±.03

F .300±.03

† Red band indicates fully mated

Shell Size	Part Number	B Thread Class 2A 0.1P-0.3L-TS (Plated)	L +.011 - .000	M +.006 - .005	GG Dia. +.011 - .010
9	10-626491-XXX	.6250	.806	.125	.973
11	492-XXX	.7500	.806	.125	1.095
13	493-XXX	.8750	.806	.125	1.221
15	494-XXX	1.0000	.806	.125	1.347
17	495-XXX	1.1875	.806	.125	1.434
19	496-XXX	1.2500	.806	.125	1.579
21	497-XXX	1.3750	.806	.125	1.721
23	498-XXX	1.5000	.838	.156	1.886
25	499-XXX	1.6250	.838	.156	1.973

* Not available for weld mount

All dimensions for reference only.

Printed Circuit Board

EMI Filter Transient

Fiber Optics

High Speed Contacts

Options Others

38999
SJT I II III

26482
Matrix 2

83723 III
Matrix Pyle

5015
Crimp Rear Release Matrix

26500 Pyle

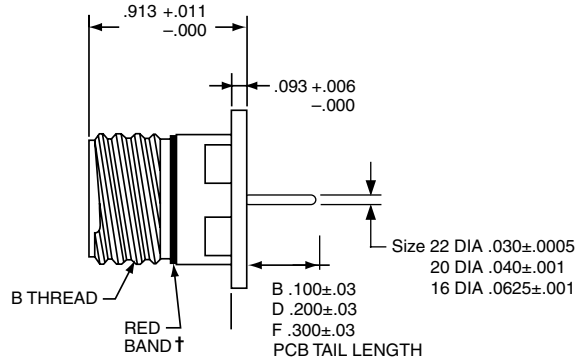
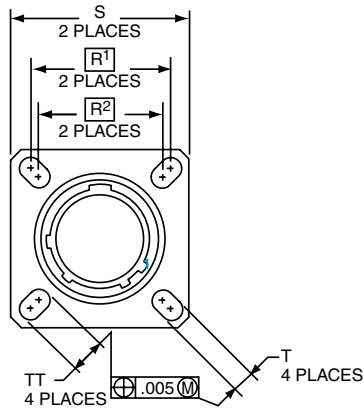
38999, Series III Hermetic – PCB Contacts

TVPS02Y Stainless Steel



Box Mounting Receptacle

Series III TV



PART #	1. Base Number	2. Coded Shell Size	3. Insert Arrg.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
See chart below	10-626	50	-35	P	1	B

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail
--------	---

2. Select a Coded Shell Size:

See chart below 501-509, designates size 9-25 shell size. Example: 501= Size 9 Shell

3. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

4. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate

6. Select a Tail Length:

B	.100±.03
D	.200±.03
F	.300±.03

Shell Size	Part Number	B Thread 0.1P-0.3L-TS (Plated)	R1	R2	S ±.010	T ±.008	TT ±.008
9	10-626501-XXX	.6250	.719	.594	.938	.128	.216
11	502-XXX	.7500	.812	.719	1.031	.128	.194
13	503-XXX	.8750	.906	.812	1.125	.128	.194
15	504-XXX	1.0000	.969	.906	1.219	.128	.173
17	505-XXX	1.1875	1.062	.969	1.312	.128	.194
19	506-XXX	1.2500	1.156	1.062	1.438	.128	.194
21	507-XXX	1.3750	1.250	1.156	1.562	.128	.194
23	508-XXX	1.5000	1.375	1.250	1.688	.154	.242
25	509-XXX	1.6250	1.500	1.375	1.812	.154	.242

† Red band indicates fully mated

NOTE: Consult Powell Electronics for availability of non-glass-sealed versions with printed circuit tail contacts.

All dimensions for reference only

□ Designates true position dimensioning

III
II
I
SJT
38999

Matrix 2
26482

Matrix Pyle
83723 III

Release Matrix
5015
Crimp Rear

26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

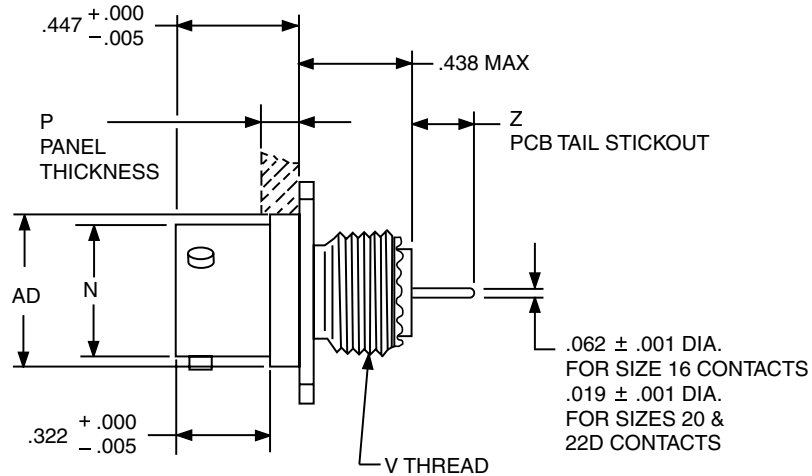
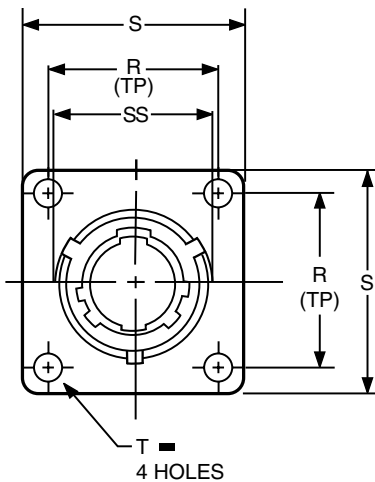
High Speed
Contacts

Options
Others



38999, Series II with PCB Contacts JTPQ00R Wall Mounting Receptacle

Series II JT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	731	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 731-739, designates size 9-25 shell size.
Example: 731= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

■ ⊕ .005 DIA (M)

Shell Size	Part Number	N +.001 -.005	P Max. Panel Thickness	R (TP)	S ±.016	T Dia. ±.005	VThread Class 2A (Plated)	AD Dia. ±.005	SS Dia. +.000 -.016	Z	
										Size 16 & 20 Contacts	Size 22D Contacts
8	88/91-569731-XXX	.473	.142	.594	.812	.120	.4375-28 UNEF	.516	.563	.257 - .200	.268 - .178
10	732-XXX	.590	.142	.719	.938	.120	.5625-24 UNEF	.633	.680	.257 - .200	.268 - .178
12	733-XXX	.750	.142	.812	1.031	.120	.6875-24 UNEF	.802	.859	.257 - .200	.268 - .178
14	734-XXX	.875	.142	.906	1.125	.120	.8125-20 UNEF	.927	.984	.257 - .200	.268 - .178
16	735-XXX	1.000	.142	.969	1.219	.120	.9375-20 UNEF	1.052	1.108	.257 - .200	.268 - .178
18	736-XXX	1.125	.142	1.062	1.312	.120	1.0625-18 UNEF	1.177	1.233	.257 - .200	.268 - .178
20	737-XXX	1.250	.142	1.156	1.438	.120	1.1875-18 UNEF	1.302	1.358	.257 - .200	.268 - .178
22	738-XXX	1.375	.142	1.250	1.562	.120	1.3125-18 UNEF	1.427	1.483	.257 - .200	.268 - .178
24	739-XXX	1.500	.142	1.375	1.688	.147	1.4375-18 UNEF	1.552	1.610	.257 - .200	.268 - .178

All dimensions for reference only.

Z dimension is determined by contact type in the insert arrangement.

Most common options are shown; other options are available.

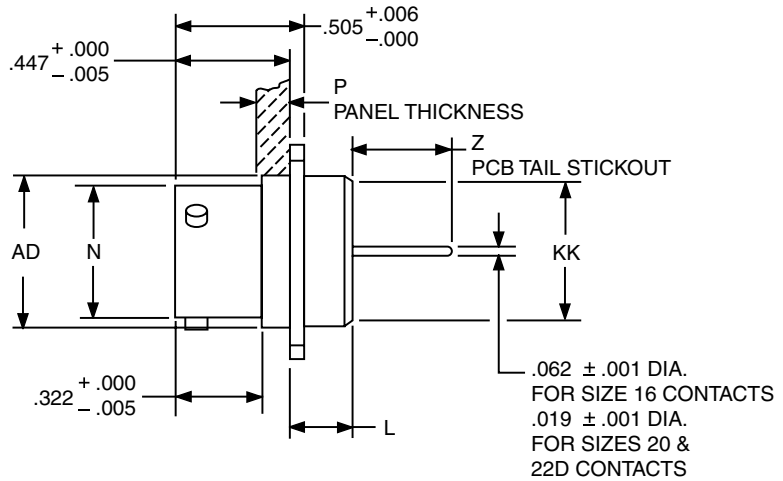
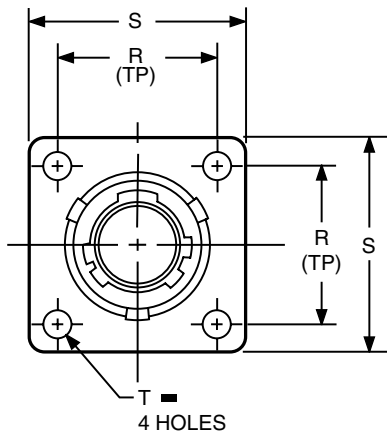
38999, Series II with PCB Contacts

JTP02R Box Mounting Receptacle

(Back Panel Mounting)



Series II JT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	741	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 741-749, designates size 9-25 shell size.
Example: 741= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

⊕ .005 DIA Ⓜ

Shell Size	Part Number	L Max.	N +.001 / -.005	P Max. Panel Thickness	R (TP)	S ±.016	T Dia. ±.005	AD Dia. ±.005	KK Dia. Max.	Z	
										Size 16 & 20 Contacts	Size 22D Contacts
8	88/91-569741-XXX	.225	.473	.147	.594	.812	.120	.516	.531	.455 - .403	.466 - .409
10	742-XXX	.225	.590	.152	.719	.938	.120	.633	.656	.455 - .403	.466 - .409
12	743-XXX	.225	.750	.152	.812	1.031	.120	.802	.828	.455 - .403	.466 - .409
14	744-XXX	.225	.875	.152	.906	1.125	.120	.927	.953	.455 - .403	.466 - .409
16	745-XXX	.225	1.000	.152	.969	1.219	.120	1.052	1.078	.455 - .403	.466 - .409
18	746-XXX	.225	1.125	.152	1.062	1.312	.120	1.177	1.203	.455 - .403	.466 - .409
20	747-XXX	.225	1.250	.179	1.156	1.438	.120	1.302	1.328	.455 - .403	.466 - .409
22	748-XXX	.225	1.375	.179	1.250	1.562	.120	1.427	1.453	.455 - .403	.466 - .409
24	749-XXX	.225	1.500	.169	1.375	1.688	.147	1.552	1.578	.455 - .403	.466 - .409

All dimensions for reference only.
Z dimension is determined by contact type in the insert arrangement.
Most common options are shown; other options are available.

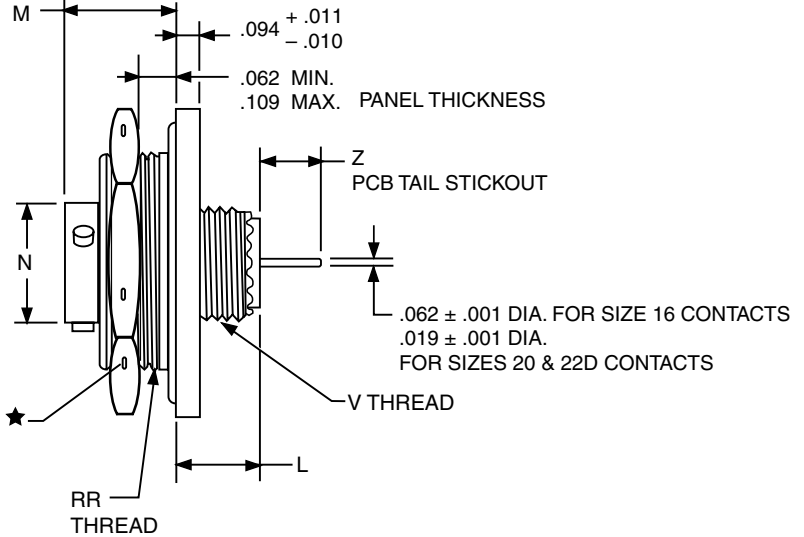
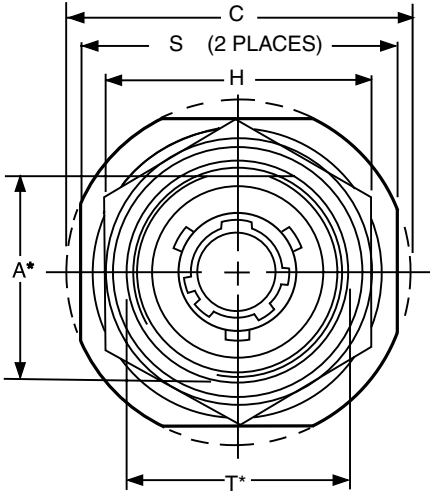
- III 38999
- II SJT
- Matrix 2 26482
- Matrix Pyle 83723 III
- Release Matrix 5015 Crimp Rear Release Matrix
- 26500 Pyle
- Printed Circuit Board
- EM1 Filter Transient
- Fiber Optics
- High Speed Contacts
- Options Others



38999, Series II with PCB Contacts JT07R Jam Nut Receptacle

Series II JT

- 38999 SJT I II III
- 26482 Matrix 2
- 83723 III Matrix Pyle
- 5015 Crimp Rear Release Matrix
- 26500 Pyle



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	751	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 751-759, designates size 9-25 shell size.
Example: 751= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

Shell Size	Part Number	A* +.000 -.010	C Max.	H Hex +.017 -.016	L Max.	M ±.005	N +.001 -.005	S ±.016	T* +.010 -.000	V Thread Class 2A (Plated)	RR Thread Class 2A (Plated)	Z	
												Size 16 & 20 Contacts	Size 22D Contacts
8	88/91-569751-XXX	.830	1.390	1.062	.453	.438	.473	1.250	.884	.4375-28 UNEF	.8750-20 UNEF	.272 - .200	.283 - .178
10	752-XXX	.955	1.515	1.188	.453	.438	.590	1.375	1.007	.5625-24 UNEF	1.0000-20 UNEF	.272 - .200	.283 - .178
12	753-XXX	1.084	1.640	1.312	.453	.438	.750	1.500	1.134	.6875-24 UNEF	1.1250-18 UNEF	.272 - .200	.283 - .178
14	754-XXX	1.208	1.765	1.438	.453	.438	.875	1.625	1.259	.8125-20 UNEF	1.2500-18 UNEF	.272 - .200	.283 - .178
16	755-XXX	1.333	1.953	1.562	.453	.438	1.000	1.781	1.384	.9375-20 UNEF	1.3750-18 UNEF	.272 - .200	.283 - .178
18	756-XXX	1.459	2.031	1.688	.453	.438	1.125	1.890	1.507	1.0625-18 UNEF	1.5000-18 UNEF	.272 - .200	.283 - .178
20	757-XXX	1.576	2.156	1.812	.422	.464	1.250	2.016	1.634	1.1875-18 UNEF	1.6250-18 UNEF	.272 - .200	.283 - .178
22	758-XXX	1.701	2.280	2.000	.422	.464	1.375	2.140	1.759	1.3125-18 UNEF	1.7500-18 UNS	.272 - .200	.283 - .178
24	759-XXX	1.826	2.405	2.125	.422	.464	1.500	2.265	1.884	1.4375-18 UNEF	1.8750-16 UN	.272 - .200	.283 - .178

All dimensions for reference only.
Z dimension is determined by contact type in the insert arrangement.
Most common options are shown; other options are available.

★ .059 dia. min. 3 lockwire holes.
Formed lockwire hole design (6 holes) is optional.
* "D" shaped mounting hole dimensions

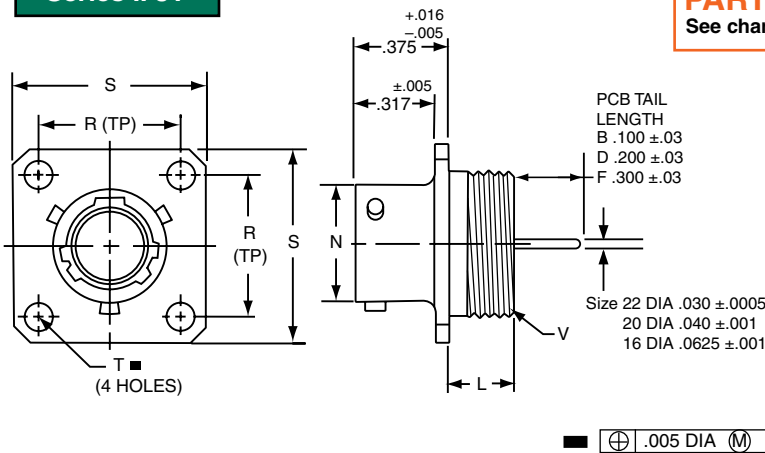
- Printed Circuit Board
- EMI Filter Transient
- Fiber Optics
- High Speed Contacts
- Options Others

38999, Series II Hermetic – PCB Contacts

JT00 Wall Mounting Receptacle



Series II JT



Shell Size	Part Number	L Max.	N +.001 - .005	R (TP)	S ±.016	T ±.005	V Thread Class 2A
8	10-626431-XXX	.234	.473	.594	.812	.120	.5625-24UNEF
10	432-XXX	.234	.590	.719	.938	.120	.6875-24UNEF
12	433-XXX	.234	.750	.812	1.031	.120	.8125-20UNEF
14	434-XXX	.234	.875	.906	1.125	.120	.9375-20UNEF
16	435-XXX	.234	1.000	.969	1.219	.120	1.0625-18UNEF
18	436-XXX	.234	1.125	1.062	1.312	.120	1.1875-18UNEF
20	437-XXX	.234	1.250	1.156	1.438	.120	1.3125-18UNEF
22	438-XXX	.234	1.375	1.250	1.562	.120	1.4375-18UNEF
24	439-XXX	.313	1.500	1.375	1.688	.147	1.5625-18UNEF

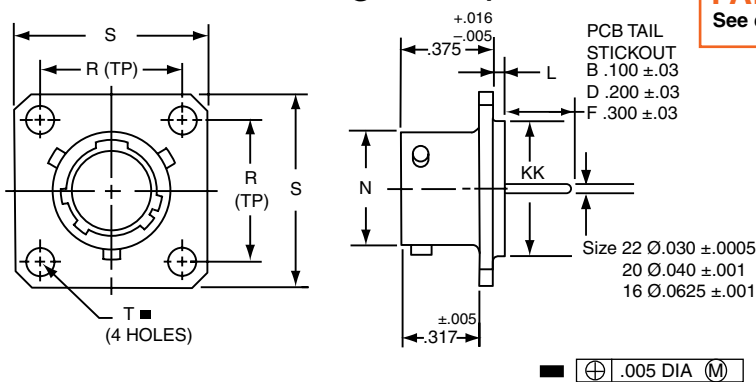
PART #	1. Base Number	2. Coded Shell Size	3. Insert Arr.	4. Contact Type/Alt. Keying Positions	5. Shell Finish	6. Tail Length
See chart below	10-626	431	-35	P	1	B

HOW TO ORDER

- Base Number:**
10-626 Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail
- Select a Coded Shell Size:**
 See chart below **431-439**, designates size 8-24 shell size
- Select an Insert Arrangement:**
 Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.
-35 Designates Insert Arrangement Number
- Contact Type/Alternate Keying Positions:**
 Refer to page 240 for alternate rotation letters to use.
P Designates Pin Contacts in Normal Position
S Designates Socket Contacts in Normal Position
- Select a Shell Finish:**
1 Hermetic seal, passivated Stainless Steel, 200°C
2 Hermetic seal, Stainless Steel w/Nickel Plate
- Select a Tail Length:**
B .100±.03
D .200±.03
F .300±.03

38999, Series II Hermetic – PCB Contacts

JT02 Box Mounting Receptacle



Shell Size	Part Number	L +.006 - .015	N +.001 - .005	R (TP)	S ±.016	T ±.005	KK +.001 - .005
8	10-626461-XXX	.051	.473	.594	.812	.120	.562
10	462-XXX	.051	.590	.719	.938	.120	.672
12	463-XXX	.051	.750	.812	1.031	.120	.781
14	464-XXX	.051	.875	.906	1.125	.120	.906
16	465-XXX	.051	1.000	.969	1.219	.120	1.031
18	466-XXX	.051	1.125	1.062	1.312	.120	1.156
20	467-XXX	.051	1.250	1.156	1.438	.120	1.250
22	468-XXX	.080	1.375	1.250	1.562	.120	1.375
24	469-XXX	.080	1.500	1.375	1.688	.147	1.500

PART #	1. Base Number	2. Coded Shell Size	3. Insert Arr.	4. Arr. Rotation	5. Shell Finish	6. Tail Length
See chart below	10-626	46	-35	P	1	B

Follow HOW TO ORDER instructions above.

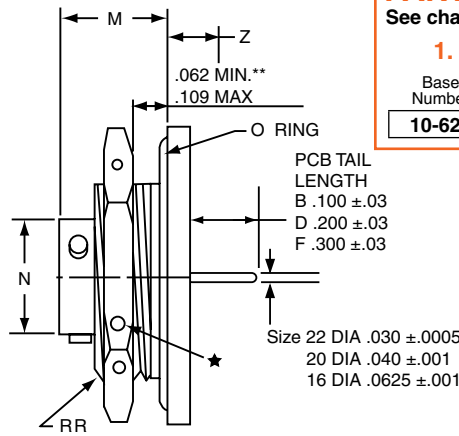
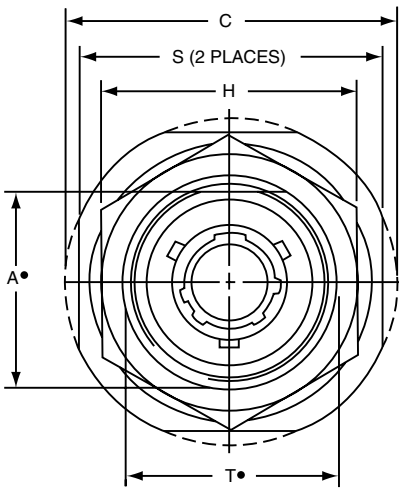
All dimensions for reference only.

- III 38999
- II SJT
- Matrix 2 26482
- Matrix Pyle 83723 III
- Release Matrix 5015
- 26500 Pyle
- Printed Circuit Board
- EMI Filter Transient
- Fiber Optics
- High Speed Contacts
- Options Others



38999, Series II Hermetic – PCB Contacts JT07 Jam Nut Receptacle

Series II JT



PART

See chart below

1.	2.	3.	4.	5.	6.
Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying Positions	Shell Finish	Tail Length
10-626	441	-35	P	1	B

Follow HOW TO ORDER instructions below.

Shell Size	Part Number	A* +.000 -.010	C Max.	H +.017 -.016	M ±.005	N +.001 -.005	S ±.016	T* +.010 -.000	Z Max.	RR Thread Class 2A
8	10-626441-XXX	.830	1.390	1.062	.438	.473	1.250	.884	.244	.8750-20UNEF
10	442-XXX	.955	1.515	1.188	.438	.590	1.375	1.007	.244	1.0000-20UNEF
12	443-XXX	1.084	1.640	1.312	.438	.750	1.500	1.134	.244	1.1250-18UNEF
14	444-XXX	1.208	1.765	1.438	.438	.875	1.625	1.259	.244	1.2500-18UNEF
16	445-XXX	1.333	1.953	1.562	.438	1.000	1.781	1.384	.244	1.3750-18UNEF
18	446-XXX	1.459	2.031	1.688	.438	1.125	1.890	1.507	.244	1.5000-18UNEF
20	447-XXX	1.576	2.156	1.812	.464	1.250	2.016	1.634	.218	1.6250-18UNEF
22	448-XXX	1.701	2.280	2.000	.464	1.375	2.140	1.759	.218	1.7500-18UNS
24	449-XXX	1.826	2.405	2.125	.464	1.500	2.265	1.884	.218	1.8750-16UN

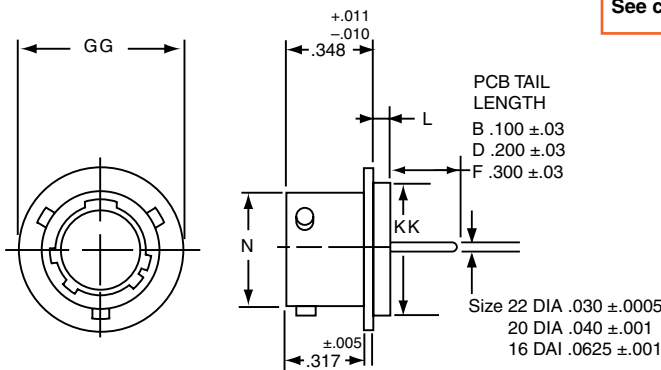
★ .059 Dia. Min. 3 lockwire holes. Formed lockwire hole design (6 holes) is optional.

• "D" shaped mounting hole dimensions.

** Panel Thickness

All dimensions for reference only.

38999, Series II Hermetic, PCB Contacts JTI Solder Mounting Receptacle



PART

See chart below

1.	2.	3.	4.	5.	6.
Base Number	Coded Shell Size	Insert Arrg.	Contact Type/Alt. Keying Positions	Shell Finish	Tail Length
10-626	451	-35	P	1	B

HOW TO ORDER

1. Base Number:

10-626 Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail

2. Select a Coded Shell Size:

See chart below 451-459, designates size 8-24 shell size

3. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35 Designates Insert Arrangement Number

4. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P Designates Pin Contacts in Normal Position

S Designates Socket Contacts in Normal Position

5. Select a Shell Finish:

1 Hermetic seal, passivated Stainless Steel, 200°C

2 Hermetic seal, Stainless Steel w/Nickel Plate

6. Select a Tail Length:

B .100±.03

D .200±.03

F .300±.03

Shell Size	Part Number	L +.011 -.010	N +.001 -.005	GG +.011 -.010	KK +.001 -.005
8	10-626451-XXX	.078	.473	.687	.562
10	452-XXX	.078	.590	.797	.672
12	453-XXX	.078	.750	.906	.781
14	454-XXX	.078	.875	1.031	.906
16	455-XXX	.078	1.000	1.156	1.031
18	456-XXX	.078	1.125	1.281	1.156
20	457-XXX	.078	1.250	1.375	1.250
22	458-XXX	.107	1.375	1.500	1.375
24	459-XXX	.107	1.500	1.625	1.500

All dimensions for reference only. Weld mounting hermetic receptacle also available. Consult Powell for availability and dimensions.

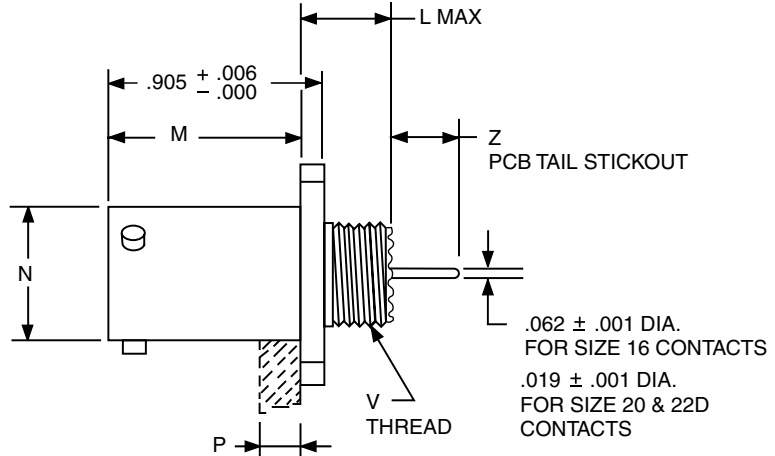
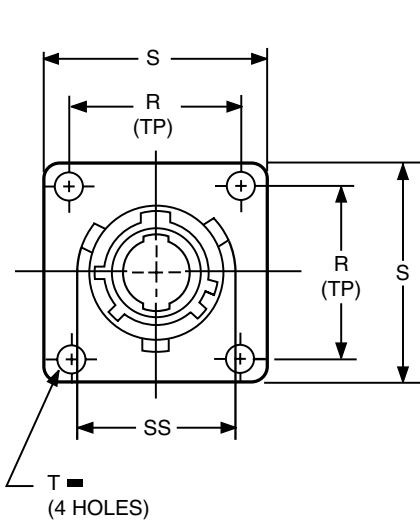
MIL-DTL-38999, Series I – PCB Contacts

LJTPQ00R Wall Mounting Receptacle



(Back Panel Mounting)

Series I LJT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	701	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 701-709, designates size 9-25 shell size.
Example: 701 = Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

■ ⊕ .005 DIA ⊙

Shell Size	Part Number	L Max.	M +.000 - .005	N Dia.	P Max. Panel Thickness	R (TP)	S +.011 - .010	T Dia. ±.005	V Thread Class 2A (Plated)	SS Dia. +.000 - .016	Z	
											Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-569701-XXX	.453	.820	.572	.234	.719	.938	.128	.4375-28 UNEF	.662	.281 - .235	.249 - .188
11	702-XXX	.453	.820	.700	.234	.812	1.031	.128	.5625-24 UNEF	.810	.281 - .235	.249 - .188
13	703-XXX	.453	.820	.850	.234	.906	1.125	.128	.6875-24 UNEF	.960	.281 - .235	.249 - .188
15	704-XXX	.453	.820	.975	.234	.969	1.219	.128	.8125-20 UNEF	1.085	.281 - .235	.249 - .188
17	705-XXX	.453	.820	1.100	.234	1.062	1.312	.128	.9375-20 UNEF	1.210	.281 - .235	.249 - .188
19	706-XXX	.453	.820	1.207	.234	1.156	1.438	.128	1.0625-18 UNEF	1.317	.281 - .235	.249 - .188
21	707-XXX	.484	.790	1.332	.204	1.250	1.562	.128	1.1875-18 UNEF	1.442	.281 - .235	.249 - .188
23	708-XXX	.484	.790	1.457	.204	1.375	1.688	.147	1.3125-18 UNEF	1.567	.281 - .235	.249 - .188
25	709-XXX	.484	.790	1.582	.193	1.500	1.812	.147	1.4375-18 UNEF	1.692	.281 - .235	.249 - .188

All dimensions for reference only.
Z dimension is determined by contact type in the insert arrangement.
Most common options are shown; other options are available.

- III 38999
- II SJT
- Matrix 2 26482
- Matrix Pyle 83723 III
- Release Matrix 5015 Crimp Rear
- 26500 Pyle

Printed Circuit Board

EMI Filter Transient

Fiber Optics

High Speed Contacts

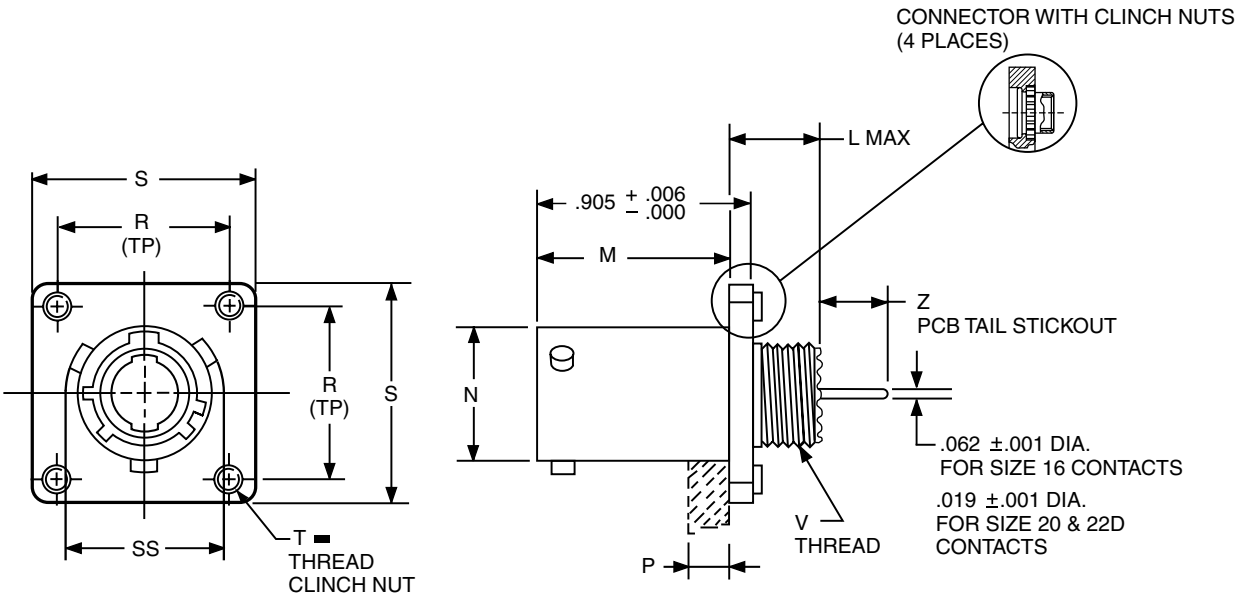
Options Others



38999, Series I with PCB Contacts LJTPQ00R Wall Mounting Receptacle

(Back Panel Mounting) (With Clinch Nuts)

Series I LJT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	628	70	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

628	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below **701-709**, designates size 9-25 shell size.
Example: **701**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. First number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

⊕ .005 DIA ⊙

Shell Size	Part Number with Clinch Nuts*	L Max.	M +.000 - .005	N Dia.	P Max. Panel Thickness	R (TP)	S +.011 - .010	T Thread	V Thread Class 2A (Plated)	SS Dia. +.000 - .016	Z	
											Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-628 701 -XXX	.453	.820	.572	.234	.719	.938	.112-40UNJC-3B	.4375-28 UNEF	.662	.281 - .235	.249 - .188
11	702 -XXX	.453	.820	.700	.234	.812	1.031	.112-40UNJC-3B	.5625-24 UNEF	.810	.281 - .235	.249 - .188
13	703 -XXX	.453	.820	.850	.234	.906	1.125	.112-40UNJC-3B	.6875-24 UNEF	.960	.281 - .235	.249 - .188
15	704 -XXX	.453	.820	.975	.234	.969	1.219	.112-40UNJC-3B	.8125-20 UNEF	1.085	.281 - .235	.249 - .188
17	705 -XXX	.453	.820	1.100	.234	1.062	1.312	.112-40UNJC-3B	.9375-20 UNEF	1.210	.281 - .235	.249 - .188
19	706 -XXX	.453	.820	1.207	.234	1.156	1.438	.112-40UNJC-3B	1.0625-18 UNEF	1.317	.281 - .235	.249 - .188
21	707 -XXX	.484	.790	1.332	.204	1.250	1.562	.112-40UNJC-3B	1.1875-18 UNEF	1.442	.281 - .235	.249 - .188
23	708 -XXX	.484	.790	1.457	.204	1.375	1.688	.138-32UNJC-3B	1.3125-18 UNEF	1.567	.281 - .235	.249 - .188
25	709 -XXX	.484	.790	1.582	.193	1.500	1.812	.138-32UNJC-3B	1.4375-18 UNEF	1.692	.281 - .235	.249 - .188

All dimensions for reference only.

*Consult Powell for more information on ordering connectors with clinch nuts. There is also a 3mm clinch nut available (part number 88/91-628401/409)

Z dimension is determined by contact type in the insert arrangement.

Most common options are shown; other options are available.

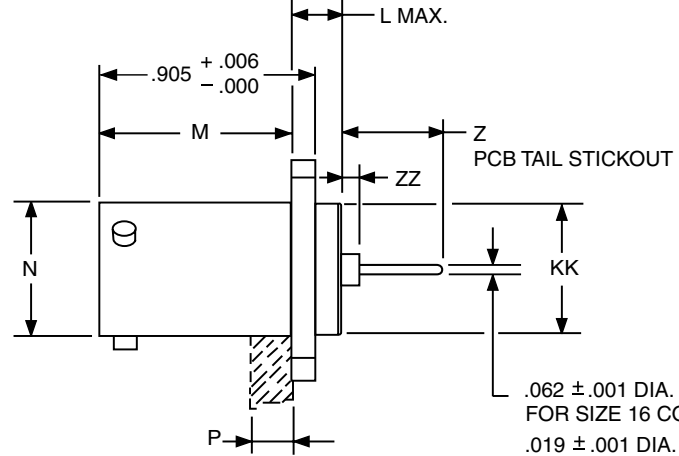
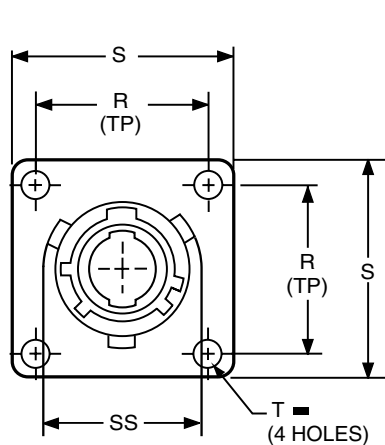
38999, Series I with PCB Contacts

LJTP02R Box Mounting Receptacle



(Back Panel Mounting)

Series I LJT



.062 ± .001 DIA.
FOR SIZE 16 CONTACTS
.019 ± .001 DIA.
FOR SIZE 20 & 22D CONTACTS

ZZ	
Pins	
12	.176/.115
16	.044/-.007
20	.161/.100
22D	.092/.031
Sockets	
12	.176/.112
16	.092/.038
20	.161/.097
22D	.200/.129

PART #	Shell Finish	Base Number	Coded Shell Size	Insert Arrangement	Contact Type/Alt. Keying Positions
See chart below	88/91	569	71	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 711-719, designates size 9-25 shell size.
Example: 711= Size 9 Shell

Shell Size	Part Number	L Max.	M +.000 - .005	N +.001 - .005	P Max. Panel Thickness	R (TP)	S +.011 - .010	T Dia. ±.005	KK Dia. +.006 - .005	SS Dia. +.000 - .016	Z	
											Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-569711-XXX	.203	.820	.572	.234	.719	.938	.128	.433	.662	.454 - .401	.468 - .406
11	712-XXX	.203	.820	.700	.234	.812	1.031	.128	.557	.810	.454 - .401	.468 - .406
13	713-XXX	.203	.820	.850	.234	.906	1.125	.128	.676	.960	.454 - .401	.468 - .406
15	714-XXX	.203	.820	.975	.234	.969	1.219	.128	.801	1.085	.454 - .401	.468 - .406
17	715-XXX	.203	.820	1.100	.234	1.062	1.312	.128	.926	1.210	.454 - .401	.468 - .406
19	716-XXX	.203	.820	1.207	.234	1.156	1.438	.128	1.032	1.317	.454 - .401	.468 - .406
21	717-XXX	.234	.790	1.332	.204	1.250	1.562	.128	1.157	1.442	.454 - .401	.468 - .406
23	718-XXX	.234	.790	1.457	.204	1.375	1.688	.147	1.282	1.567	.454 - .401	.468 - .406
25	719-XXX	.234	.790	1.582	.193	1.500	1.812	.147	1.407	1.692	.454 - .401	.468 - .406

All dimensions for reference only.
Z dimension is determined by contact type in the insert arrangement.
Most common options are shown; other options are available.

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

⊕ .005 DIA Ⓜ

- III 38999
- II I SJT
- Matrix 2 26482
- Matrix Pyle 83723 III
- Release Matrix 5015 Crimp Rear
- 26500 Pyle

- Printed Circuit Board
- EMI Filter Transient
- Fiber Optics
- High Speed Contacts
- Options Others

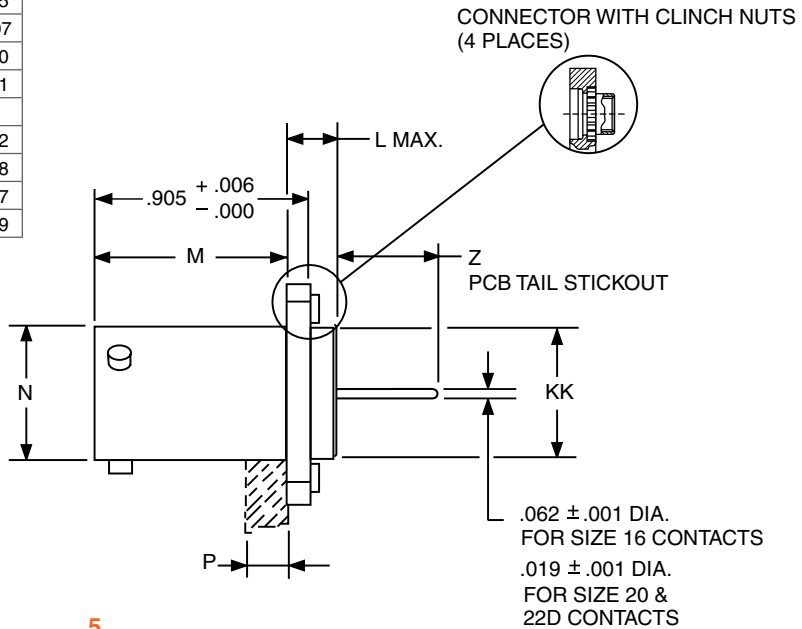
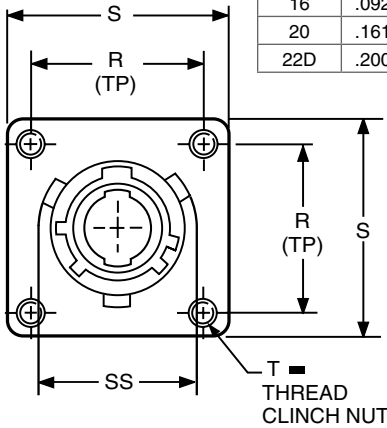


38999, Series I with PCB Contacts LJTP02R Box Mounting Receptacle

(Back Panel Mounting) (With Clinch Nuts)

Series I LJT

ZZ	
Pins	
12	.176/.115
16	.044/-.007
20	.161/.100
22D	.092/.031
Sockets	
12	.176/.112
16	.092/.038
20	.161/.097
22D	.200/.129



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	628	711	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

628	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below 711-719, designates size 9-25 shell size.
Example: 711= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

■ (+) .005 DIA (M)

Shell Size	Part Number with Clinch Nuts	L Max.	M +.000 / -.005	N +.001 / -.005	P Max. Panel Thickness	R (TP)	S +.011 / -.010	T Thread	KK Dia. +.006 / -.005	SS Dia. +.000 / -.016	Z	
											Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-628711-XXX	.203	.820	.572	.234	.719	1.031	.112-40UNJC-3B	.433	.662	.454 - .401	.468 - .406
11	712-XXX	.203	.820	.700	.234	.812	1.125	.112-40UNJC-3B	.557	.810	.454 - .401	.468 - .406
13	713-XXX	.203	.820	.850	.234	.906	1.172	.112-40UNJC-3B	.676	.960	.454 - .401	.468 - .406
15	714-XXX	.203	.820	.975	.234	.969	1.281	.112-40UNJC-3B	.801	1.085	.454 - .401	.468 - .406
17	715-XXX	.203	.820	1.100	.234	1.062	1.375	.112-40UNJC-3B	.926	1.210	.454 - .401	.468 - .406
19	716-XXX	.203	.820	1.207	.234	1.156	1.469	.112-40UNJC-3B	1.032	1.317	.454 - .401	.468 - .406
21	717-XXX	.234	.790	1.332	.204	1.250	1.625	.112-40UNJC-3B	1.157	1.442	.454 - .401	.468 - .406
23	718-XXX	.234	.790	1.457	.204	1.375	1.750	.138-32UNJC-3B	1.282	1.567	.454 - .401	.468 - .406
25	719-XXX	.234	.790	1.582	.193	1.500	1.875	.138-32UNJC-3B	1.407	1.692	.454 - .401	.468 - .406

All dimensions for reference only.

*Consult Powell for more information on ordering connectors with clinch nuts. There is also a 3mm clinch nut available (part number 88/91-628410/419)

Z dimension is determined by contact type in the insert arrangement.

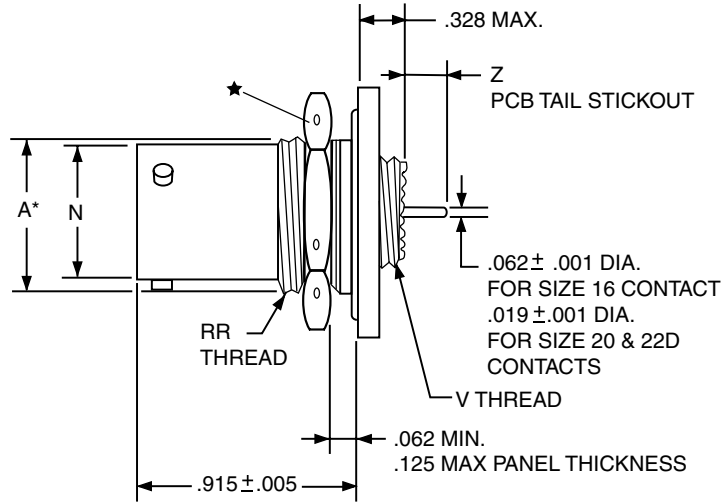
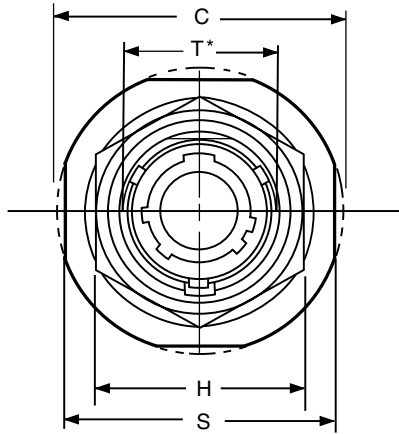
Most common options are shown; other options are available.

38999, Series I with PCB Contacts

LJT07R Jam Nut Receptacle



Series I LJT



PART #	1. Shell Finish	2. Base Number	3. Coded Shell Size	4. Insert Arrangement	5. Contact Type/Alt. Keying Positions
See chart below	88/91	569	72	-35	P

HOW TO ORDER

1. Select a Shell Finish:

88	Designates olive drab cadmium plated connector shell
91	Designates electroless nickel plated connector shell

2. Base Number:

569	Base Number
-----	-------------

3. Select a Coded Shell Size:

See chart below **721-729**, designates size 9-25 shell size.
Example: **721**= Size 9 Shell

4. Select an Insert Arrangement:

Refer to insert availability chart on page 239 and pin-out illustrations on pages 241-255. In the chart the first number represents the Shell size and the second number is the insert Arrangement.

-35	Designates Insert Arrangement Number
-----	--------------------------------------

5. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

Shell Size	Part Number	A* +.000 -.010	C Max.	H Hex +.017 -.016	L Max.	N +.001 -.005	S ±.016	T* +.010 -.000	VThread Class 2A (Plated)	RRThread Class 2A (Plated)	Z	
											Size 16 & 20 Contacts	Size 22D Contacts
9	88/91-569721-XXX	.669	1.199	.875	.625	.572	1.062	.697	.4375-28 UNEF	.6875-24 UNEF	.229 - .175	.243 - .182
11	722-XXX	.769	1.386	1.000	.625	.700	1.250	.822	.5625-24 UNEF	.8125-20 UNEF	.229 - .175	.243 - .182
13	723-XXX	.955	1.511	1.188	.625	.850	1.375	1.007	.6875-24 UNEF	1.0000-20 UNEF	.229 - .175	.243 - .182
15	724-XXX	1.084	1.636	1.312	.625	.975	1.500	1.134	.8125-20 UNEF	1.1250-18 UNEF	.229 - .175	.243 - .182
17	725-XXX	1.208	1.761	1.438	.625	1.100	1.625	1.259	.9375-20 UNEF	1.2500-18 UNEF	.229 - .175	.243 - .182
19	726-XXX	1.333	1.949	1.562	.656	1.207	1.812	1.384	1.0625-18 UNEF	1.3750-18 UNEF	.207 - .158	.221 - .165
21	727-XXX	1.459	2.073	1.688	.750	1.332	1.938	1.507	1.1875-18 UNEF	1.5000-18 UNEF	.207 - .158	.221 - .165
23	728-XXX	1.580	2.199	1.812	.750	1.457	2.062	1.634	1.3125-18 UNEF	1.6250-18 UNEF	.207 - .158	.221 - .165
25	729-XXX	1.709	2.323	2.000	.750	1.582	2.188	1.759	1.4375-18 UNEF	1.7500-18 UNS	.207 - .158	.221 - .165

All dimensions for reference only.
Z dimension is determined by contact type in the insert arrangement.
Most common options are shown; other options are available.

- * .059 dia. min. 3 lockwire holes.
- Formed lockwire hole design (6 holes) is optional.
- * "D" shaped mounting hole dimensions

III	38999
II	
I	
SJT	
Matrix 2	26482
Matrix	83723 III
Pyle	
Crimp Rear Release Matrix	5015
	26500 Pyle

Printed
Circuit Board

EMI Filter
Transient

Fiber Optics

High Speed
Contacts

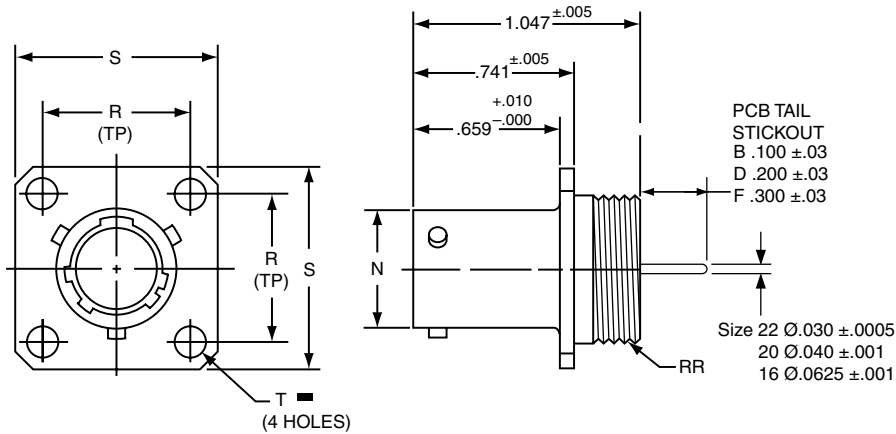
Options
Others



38999, Series I Hermetic – PCB Contacts

LJT00 Wall Mounting Receptacle

Series I LJT



PART #	1. Base Number	2. Coded Shell Size	3. Contact Type/Alt. Keying Positions	4. Shell Finish	5. Tail Length
See chart below	10-626	401	P	1	B

HOW TO ORDER

1. Base Number:

10-626	Base Number for MIL-DTL-38999 Series III Hermetic with PCB Tail
---------------	---

4. Select a Shell Finish:

1	Hermetic seal, passivated Stainless Steel, 200°C
2	Hermetic seal, Stainless Steel w/Nickel Plate

2. Select a Coded Shell Size:

See chart below **401-409**, designates size 9-25 shell size

3. Contact Type/Alternate Keying Positions:

Refer to page 240 for alternate rotation letters to use.

P	Designates Pin Contacts in Normal Position
S	Designates Socket Contacts in Normal Position

5. Select a Tail Length:

B	.100±.03
D	.200±.03
F	.300±.03

■ $\text{⊕} \text{ } .005 \text{ DIA } \text{ (M)}$

Shell Size	Part Number	N Dia. +.001 –.005	R (TP)	S ±.016	T Dia. ±.005	RR Thread Class 2A
9	10-626401-XXX	.572	.719	.938	.128	.6875-24 UNEF
11	402-XXX	.700	.812	1.031	.128	.8125-20 UNEF
13	403-XXX	.850	.906	1.125	.128	.9375-20 UNEF
15	404-XXX	.975	.969	1.219	.128	1.0625-18 UNEF
17	405-XXX	1.100	1.062	1.312	.128	1.1875-18 UNEF
19	406-XXX	1.207	1.156	1.438	.128	1.3125-18 UNEF
21	407-XXX	1.332	1.250	1.562	.128	1.4375-18 UNEF
23	408-XXX	1.457	1.375	1.688	.147	1.5625-18 UNEF
25	409-XXX	1.582	1.500	1.812	.147	1.6875-18 UNEF

All dimensions for reference only.



Stand-off Adapter for use with 38999 PCB Connectors

Series III TV

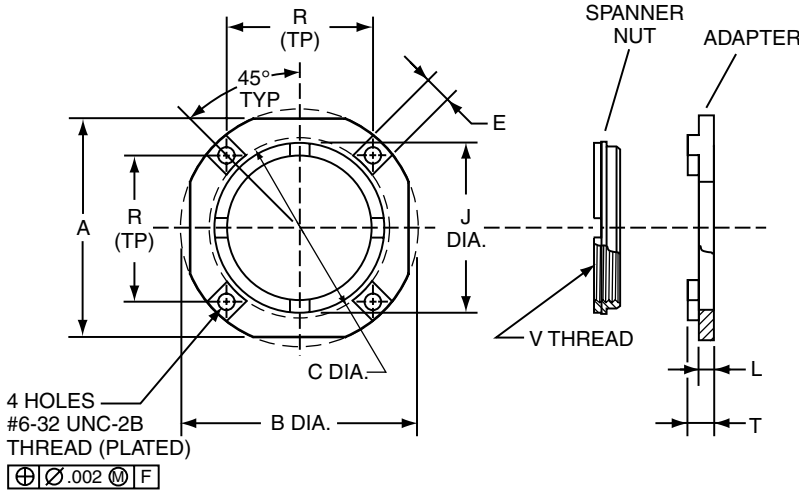
Series II JT

Series I LJT

Amphenol's stand-off adapter and spanner nut assembly allows any MIL-DTL-38999 jam nut receptacle to support PCB contacts and may eliminate the need for special stand-off shell design. Consult Powell for more information.



Tri-Start MIL-DTL-38999 Jam Nut Connector with Stand-off Adapter



FINISH DATA**	
Suffix Designation	Description
9	Olive drab cadmium plate, nickel base plate
G	Electroless nickel plate
None	Passivated Stainless Steel
8	Nickel Plated

** Other finishes available; consult Powell for further information.

- HOW TO ORDER
- Order by applicable 10- part number in table below. Last digit designates finish - see finish table.

Shell Size	Part Number	A ± .003	B Dia. ± .003	C Dia. +.005 -0.001	E ± .005	J Dia. +.005 -0.000	L ± .003	R (TP)	T* ± .002	V Thread Metric Plated
9	10-658266-01()	1.062	1.188	.750	.200	.625	.150	.688	.325	M12 X 1-6H
11	10-658266-02()	1.250	1.375	.900	.200	.744	.150	.813	.325	M15 X 1-6H
13	10-658266-03()	1.375	1.500	.975	.200	.862	.150	.860	.325	M18 X 1-6H
15	10-658266-04()	1.500	1.625	1.125	.200	1.019	.150	.968	.325	M22 X 1-6H
17	10-658266-05()	1.625	1.750	1.250	.200	1.137	.150	1.062	.325	M25 X 1-6H
19	10-658266-06()	1.812	1.938	1.375	.200	1.255	.150	1.188	.325	M28 X 1-6H
21	10-658266-07()	1.938	2.062	1.469	.200	1.373	.150	1.250	.325	M31 X 1-6H
23	10-658266-08()	2.062	2.188	1.625	.200	1.492	.150	1.344	.325	M34 X 1-6H
25	10-658266-09()	2.188	2.312	1.750	.200	1.610	.150	1.438	.325	M37 X 1-6H
9	10-658266-10()	1.062	1.188	.750	.200	.625	.150	.688	.362	M12 X 1-6H
11	10-658266-11()	1.250	1.375	.900	.200	.744	.150	.813	.362	M15 X 1-6H
13	10-658266-12()	1.375	1.500	.975	.200	.862	.150	.860	.362	M18 X 1-6H
15	10-658266-13()	1.500	1.625	1.125	.200	1.019	.150	.968	.362	M22 X 1-6H
17	10-658266-14()	1.625	1.750	1.250	.200	1.137	.150	1.062	.362	M25 X 1-6H
19	10-658266-15()	1.812	1.938	1.375	.200	1.255	.150	1.188	.362	M28 X 1-6H
21	10-658266-16()	1.938	2.062	1.469	.200	1.373	.150	1.250	.362	M31 X 1-6H
23	10-658266-17()	2.062	2.188	1.625	.200	1.492	.150	1.344	.362	M34 X 1-6H
25	10-658266-18()	2.188	2.312	1.750	.200	1.610	.150	1.438	.362	M37 X 1-6H

All dimensions for reference only.

* For information on additional "T" dimension lengths, consult Powell. Consult Powell Electronics for stainless steel availability & part numbers.

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