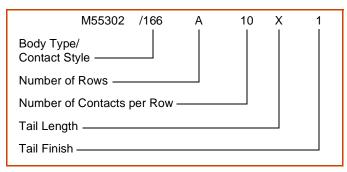
# Low Mating Force how to order (military types)

# **MB, DB, PC Connectors** Military Part Number Ordering Procedure

Example part number M55302/166A10X1 is shown as follows:



#### **Body Type/Contact Style**

- /166 designates MB-P (Mother Board, Printed Circuit Board Termination)
- /167 designates MB-W (Mother Board, Wire-wrap Contacts)
- /168 designates PC (Printed Circuit, 90° Printed Circuit Board Termination)
- /170 designates DB (Daughter Board, 90° Printed Circuit Board Termination)

#### Number of Rows

- A 2 Rows
- B-3 Rows
- C-4 Rows

#### Number of Contacts per Row

Contact counts per row range from 10 to 100

(Only 2 digits permitted in this space; for 100 contacts per row, use 00)

#### Tail Length

MB-P (PCB Termination)*	MB-W** (Wire-wrap)
X – .300 ±.025 Y – .145 ±.025 Z – .113 ±.025	Y – .700 ±.025 Z – .542 ±.025
DB*	PC*
X300 ±.025 Y150 ±.025 Z120 ±.025	Y150 +.035 025 Z095 +.035 025

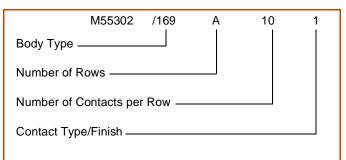
\* Reference "J" Dimension on all connector drawings in this catalog. \*\* For MB-W only: Reference "H" Dimension on connector drawing on page 12.

#### Tail Finish

- 1 Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper
- 2 Gold per MIL-G-45204, type II, grade C, class 00 (01 for MB-W) over nickel per QQ-N-290

# **IO** Connectors Military Part Number Ordering Procedure

Example part number M55302/169A101 is shown as follows:



## Body Type

/169 designates IO (Input/Output) (Contact type/finish is last digit of IO part number see list of options below)

#### Number of Rows

- A 2 Rows
- B-3 Rows
- C-4 Rows

#### Number of Contacts per Row

Contact counts per row range from 10 to 100

(Only 2 digits permitted in this space; for 100 contacts per row, use 00)

#### Contact Type/Finish

- 1 Crimp contact Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper
- 2 Crimp contact Gold per MIL-G-45204, type II, grade C, class 1 over copper
- 3 Connectors supplied less contacts
- 4 PCB contacts installed with .145 ±.025 stickout -Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper (Reference "J" Dimension on connector drawing on page 20).

#### To Order IO Contacts

(For use with connectors less contacts)

M55302/171-1

\_\_suffix designates crimp well finish

Crimp well finish

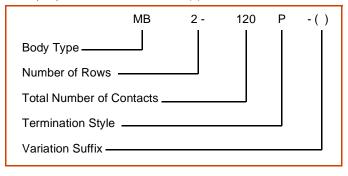
- 1 Crimp contact - Tin lead per MIL-P-81728, 50 to 70% tin, .0001 min. thick over copper
- 2 Crimp contact Gold per MIL-G-45204, type II, grade C class 1 over copper

To order Accessories, see page 7.

# Low Mating Force how to order (proprietary types)

# MB, DB, **IO**, PC Connectors Proprietary Part Number Ordering Procedure

Example part number MB2-120P- ( ) is shown as follows:



# **Body Type**

MB designates Mother Board DB designates Daughter Board IO designates Input/Output PC designates Printed Circuit

#### Number of Rows

2, 3 or 4 rows

Г

### **Total Number of Contacts**

See Contact Arrangements, pages 8 and 9

#### **Standard Termination Style**

т

(Stickout values below apply to "J" dimension referenced on individual connector catalog pages.)

MBX-XXXP	Straight PCB stud, $.021 \text{ dia}, .113 \pm .025 \text{ stick-out, Sn/Ni plate}$
MBX-XXXW	Solderless wrap, .025 sq., .507 ±.025 stickout, Sn/Ni plate
DBX-XXXP	90° PCB stud, .021 dia, .085 ±.025 stickout, Sn/Ni plate
IOX-XXXC	Crimp, rear removable contact, size 22D wire well, Sn/Ni plate
IOX-XXXP	PCB stud, .021 dia, .145 ±.025 stickout, Sn/Ni plate
PCX-XXXP	90° PCB stud, .021 dia, .095 <sup>+.035</sup> / <sub>025</sub> stickout, Sn/Ni plate

#### LEGEND:

Sn/Ni designates Tin over Nickel Au/Ni designates Gold over Nickel Au/Cu designates Gold over Copper SnPb/Cu designates Tin-Lead over Copper

#### Variation Suffix

(Stickout values below apply to "J" dimension referenced on individual connector catalog pages.)

<ul> <li>(701)</li> <li>(702)</li> <li>(703)</li> <li>(704)</li> <li>(705)</li> <li>(706)</li> <li>(707)</li> <li>(709)</li> </ul>	termination length) Gold plate in accordance with MIL-G-45204, type II, .000050 min. thick gold over .00015 min. thick copper (standard termination length) PCB stud stickout of .145, Sn/Ni plate, MB-P Au/Ni [same as (700)], PCB stud stickout of .145, MB-F Au/Cu [same as (701)], PCB stud stickout of .145, MB- 90° PCB stud, .120 stickout. Sn/Ni plate, DB Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
(703) (704) (705) (706) (707)	PCB stud stickout of .145, Sn/Ni plate, MB-P Au/Ni [same as (700)], PCB stud stickout of .145, MB-F Au/Cu [same as (701)], PCB stud stickout of .145, MB- 90° PCB stud, .120 stickout. Sn/Ni plate, DB Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
(703) (704) (705) (706) (707)	Au/Ni [same as (700)], PCB stud stickout of .145, MB-F Au/Cu [same as (701)], PCB stud stickout of .145, MB- 90° PCB stud, .120 stickout. Sn/Ni plate, DB Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
(704) (705) (706) (707)	Au/Cu [same as (701)], PCB stud stickout of .145, MB- 90° PCB stud, .120 stickout. Sn/Ni plate, DB Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
(705) (706) (707)	90° PCB stud, .120 stickout. Sn/Ni plate, DB Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
(706) (707)	Au/Ni [same as (700)], 90° PCB stud .120 stickout, DB Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
(707)	Au/Cu [same as (701)], 90° PCB .120 stickout, DB PCB stud stickout of .300 DB (90°), .300 MB-P &
` '	PCB stud stickout of .300 DB (90°), .300 MB-P &
(709)	
	.335 IO-P, Sn/Ni plate
(710)	Solderless wrap, .025 sq., .665 stickout, Sn/Ni plate, MB-W
(711)	Solderless wrap, .025 sq., .665 stickout, Au/Ni, [same as (700)], MB-W
(713)	PCB stud stickout of .060, Sn/Ni plate, IO-P
(714)	90° PCB stud stickout of .150, Sn/Ni plate, PC & DB
(715)	Solderless wrap, .025 sq., .665 stickout, Au/Cu [same as (701)], MB-W
(716)	90° PCB stud stickout of .085 matte tin, DB
(717)	90° PCB stud stickout of .095 matte tin, PC
(718)	90° PCB stud stickout of .120 matte tin, DB
(719)	PCB stud stickout of .300 MB-P & .335 IO-P, matte tin
(720)	PCB stud stickout of .060 matte tin, IO-P
(721)	PCB stud stickout of .500, Sn/Ni plate, IO-P
(722)	PCB stud stickout of .356 matte tin, MB-P
(723)	PCB stud stickout of .192, Sn/Ni plate, MB-P
(724)	90° PCB stud stickout of .095, RTV potted rear, Sn/Ni plate, PC
(725)	90° PCB stud stickout of .120, RTV potted rear, Sn/Ni plate, DB
(726)	90° PCB stud stickout of .150, RTV potted rear, Sn/Ni plate, PC & DB
(727)	PCB stud stickout of .145, RTV potted rear, Sn/Ni plate, MB-P
(728)	PCB stud stickout of .145, Au/Ni, [same as (700)], RTV potted rear, MB-P
(729)	90° PCB stud stickout of .120, Au/Ni, [same as (700)], RTV potted rear, DB
(730)	90° PCB stud stickout of .150, Au/Ni, [same as (700) above], PC and DB
(731)	PCB stud stickout of .145, matte tin, MB-P

Variation Suffixes continued on next page.