D-Sub Connectors XM3

XM3 Series

D-Sub Connectors That Are Ideal for Office Equipment Interfaces

- Shielded against EMI.
- Compact, robust connectors with metal shells.
- Anchors and Grounding Fixtures are available.

RoHS Compliant



Slim Models Join the XM2-L/XM3-L Series

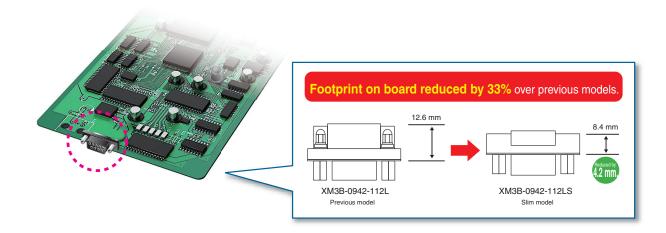
Refer to page 7 for detailed specifications.

XM3B-LS

Space-saving 9-pin Slim D-sub Socket Connectors for Boards

- Board mounting area is reduced by 33% (compared with previous models) using depth of 8.4 mm.
- D-sub sockets with nine right-angle DIP terminals.
- Mounting board thickness of either 1.6 mm or 1.0 mm (from difference in lock pin structure).





XM3 Series

Connectors

Model	XM3C	XM3F	ХМЗА	XM3D
	Plugs with Right-angle DIP Terminals	Sockets with Straight DIP Terminals	Plugs with Solder Cup Terminals	Sockets with Solder Cup Terminals
Appearance		Constitution of the second of		

■Ratings and Characteristics

Model	Plugs with Solder Cup Terminals: XM3A Plugs with Right-angle DIP Terminals: All XM3C models except those with 37 pins XM3C-0922-□□□ XM3C-1522-□□□ XM3C-2522-□□□ Sockets with Solder Cup Terminals: XM3D Sockets with Straight DIP Terminals: XM3F	Plugs with Right-angle DIP Terminals: XM3C models with 37 pins XM3C-3722-□□□				
Rated current	5 A	3 A				
Rated voltage	300 VAC					
Contact resistance	15 mΩ max. (at 20 mVDC, 100 mA max.)					
Insulation resistance	1,000 MΩ min. (at 500 V DC)					
Withstand voltage	1,000 VAC for 1 min (leakage current: 1 mA max.)					
Total insertion force	Number of pins × 3.33 N max					
Individual pull-out force	0.29 N min. (for gauge diameter of 0.99 mm)					
Insertion durability	200 times					
Operating temperature	-55°C to 105°C (with no icing)					
Shield effectiveness (electrical field method)	Mounted in panel: 25 dB min. (30 to 900 MHz) Mounted on board: 20 dB min. (30 to 300 MHz)					

■Materials and Finish

Item	Model	I XM3C XM3F		XM3A	XM3D	
Housing	Housing Fiber-glass reinforced PBT resin (UL94V-0)/black		Fiber-glass reinforced PBT resin (UL94V-0)/Milky white			
Contacts	Mating end Phosphor bronze/nickel base, gold plated		Bronze/nickel base, gold plated	Phosphor bronze/nickel base, gold plated		
Contacts	Terminals	Phosphor bronze/nickel base, tin	phor bronze/nickel base, tin plated		Phosphor bronze/nickel base, tin plated	
Shell		Steel/nickel				

■Applicable Wires

The applicable wires for solder cup terminals are AWG 22 to 28 (solid or stranded).

OMRON

XM3C Plugs with Right-angle DIP Terminals

■ Model Number Legend.

XM3C-□□**22-**□□□

1 2 3

1 Anchor Type 2 Anchor Screw Specifications

1: Anchor 2 1: M2.6 x 0.45 metric screws 1: Tap-hole Grounding Fixture

5: No anchors 3: Inch screws 2: Lock Pin Grounding Fixture

0: No anchors

Note: If 1, 2, or 3 are omitted in the model number, then no Anchor or Grounding Fixture is

3 Grounding Fixture

Ordering Information

	Anchor 2 and Tap-hole Grounding Fixture	Anchor 2 and Lock Pin Grounding Fixture	No Anch	or or Grounding Fixture	
Appear- ance	Tap-hole Grounding Fixture	Lock Pin Grounding Fixture Anchor 2			Minimum ordering quantity (pieces)
	Anchor 2: XM2Z-0011 (N	2.6 x 0.45 metric screws)			
Accessories No. of contacts	Tap-hole Grounding Fixture	Lock Pin Grounding Fixture			
9	XM3C-0922-111	XM3C-0922-112		XM3C-0922	90
15	XM3C-1522-111	XM3C-1522-112		XM3C-1522	70
25	XM3C-2522-111	XM3C-2522-112	XM3C-2522		50
37	XM3C-3722-111	XM3C-3722-112		XM3C-3722	40
	No Anchor and Tap-hole Grounding Fixture	No Anchor and Lock Pin Grounding Fixture			
Appear- ance	Tap-hole Grounding Fixture	Lock Pin Grounding Fixture	Minimum ordering quantity (pieces)		
	No ar	nchors			
Acces- sories No. of contacts	Tap-hole Grounding Fixture	Lock Pin Grounding Fixture			
9	XM3C-0922-501	XM3C-0922-502	90		
15	XM3C-1522-501	XM3C-1522-502	70		
25	XM3C-2522-501	XM3C-2522-502	50		
37	XM3C-3722-501	XM3C-3722-502	40		

Note: Also available as standard models are the XM3C- \square 22-111/-112 with Anchor 2 (M 2.6 x 0.45) and Grounding Fixture, as well as the XM3C- \square 22-501/502 with Grounding Fixture and no Anchor.

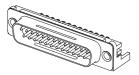
The enclosed Tap-hole Grounding Fixture is two M3 x 0.5, and the Lock Pin Grounding Fixture is M3 x 0.5 on the Anchor side.

Dimensions (Unit: mm)

Right-angle DIP Terminals

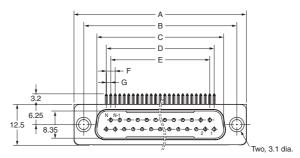
XM3C-□□22 (No Anchor or Grounding Fixture)

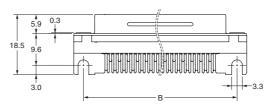
XM3C-□□22-501 (No Anchor, Tap-hole Grounding Fixture Included) XM3C-□□22-502 (No Anchor, Long Pin Grounding Fixture Included) XM3C-□□22-111 (Anchor 2, Tap-hole Grounding Fixture Included) XM3C-□□22-112 (Anchor 2, Long Pin Grounding Fixture Included)

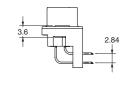


The above illustration is for the 25-pin model (no Anchor or Grounding Fixture).

Note: The XM3C is produced based on JIS X5101. The pin pitch is in a mixed arrangement of 2.77 mm and 2.74 mm following JIS standards (for 25-pin and 37-pin models). A uniform pitch of 2.76 mm, however, is recommended for the mounting holes. A board processed using a pinch of 2.76 mm will have sufficient margin and pose no practical problems.







Mounting Holes (t=1.6mm, Bottom View)

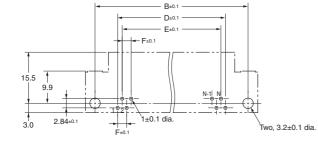


Table of Dimensions

Dimensions (mm) No. of contacts	Α	В	С	D	E	F	G
9	30.8	24.99	16.91	10.96	8.22	2.74	1.37
15	39.1	33.32	25.25	19.18	16.44	2.74	1.37
25	53.0	47.04	38.96	33.12	30.36	2.76	1.38
37	69.3	63.50	55.42	49.68	46.92	2.76	1.38

XM3F Sockets with Straight DIP Terminals

■Ordering Information

	No Anchor or Grounding Fixture	Anchor and Lock Pin Grounding Fixture	
Appearance No. of contacts	Constitution of the second of	Constitution of the second of	Minimum ordering quantity (pieces)
9	XM3F-0920	XM3F-0920-112	90
15	XM3F-1520	XM3F-1520-112	70
25	XM3F-2520	XM3F-2520-112	50
37	XM3F-3720	XM3F-3720-112	40

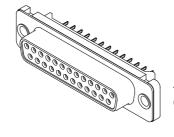
■Dimensions (Unit: mm)

Straight DIP Terminals

XM3F-□□20

(No Anchor or Grounding Fixture)

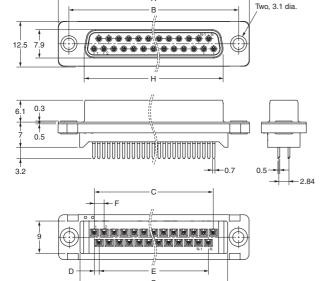


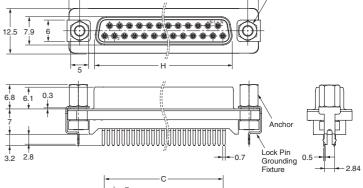


The illustration on the left is for the 25-pin model (no Anchor or Grounding Fixture).

The illustration on the left is for the 25-pin model (Anchor and Grounding Fixture).

M2.6×0.45





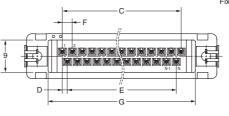
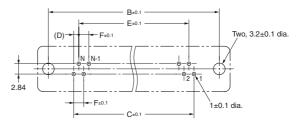


Table of Dimensions

Dimensions (mm) No. of contacts	А	В	С	D	E	F	G	Н
9	30.7	24.99	10.98	1.37	8.22	2.74	19.00	16.33
15	39.0	33.32	19.20	1.37	16.44	2.74	27.12	24.66
25	52.9	47.04	33.12	1.38	30.36	2.76	41.04	38.38
37	69.2	63.50	49.68	1.38	46.92	2.76	57.60	54.84

Mounting Holes (t=1.6mm, Bottom View)



XM3A Plugs with Solder Cup Terminals XM3D Sockets with Solder Cup Terminals

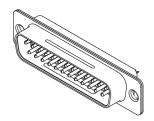
■Ordering Information

Appearance	Plug	Socket	
No. of contacts			Minimum ordering quantity (pieces)
9	XM3A-0921	XM3D-0921	
15	XM3A-1521	XM3D-1521	50
25	XM3A-2521	XM3D-2521	50
37	XM3A-3721	XM3D-3721	

■Dimensions (Unit: mm)

Plugs with Solder Cup Terminals

XM3A-□□21



Note: The illustration above is for a 25-pin model.

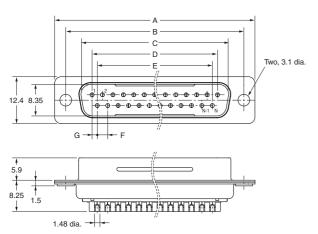
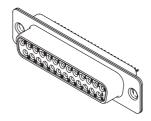


Table of Dimensions (XM3A)

Dimensions (mm) No. of contacts	А	В	С	D	E	F	G
9	30.7	24.99	16.91	10.96	8.22	2.74	1.37
15	39.0	33.32	25.25	19.18	16.44	2.74	1.37
25	52.9	47.04	38.96	33.12	30.36	2.76	1.38
37	69.2	63.50	55.42	49.68	46.92	2.76	1.38

Sockets with Solder Cup Terminals

XM3D-□□21



Note: The illustration above is for a 25-pin model.

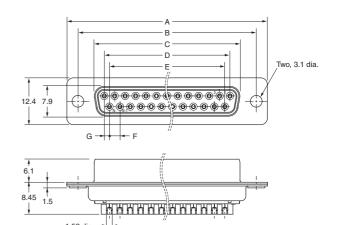


Table of Dimensions (XM3D)

	Dimensions (mm) No. of contacts	Α	В	С	D	Е	F	G
1	9	30.7	24.99	16.33	10.96	8.22	2.74	1.37
1	15	39.0	33.32	24.66	19.18	16.44	2.74	1.37
1	25	52.9	47.04	38.38	33.12	30.36	2.76	1.38
	37	69.2	63.50	54.84	49.68	46.92	2.76	1.38

XM3B-LS Sockets with Right-angle DIP Terminals

■Ratings and Characteristics

Rated current	3 A
Rated voltage	300 VAC
Contact resistance	20 mΩ max. (at 20 mVDC, 100 mA max.)
Insulation resistance	1,000 M Ω min. (at 500 VDC for 1 min)
Withstand voltage	1,000 VAC for 1 min (leakage current: 1 mA max.)
Insertion durability	100 times
Operating temperature	-25 to 105°C (with no condensation or icing)

■Ordering Information

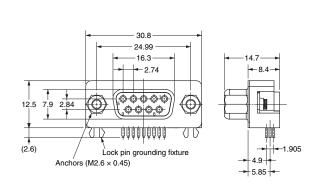
Appearance No. of contacts Accessories	Anchors, M2.6 × 0.45	Minimum ordering quantity (pieces)
9	XM3B-0942-112LS	80

■Materials and Finish

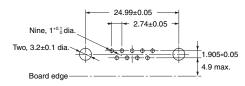
Housing	Fiber-glass reinforced PBT resin (UL94V-0)/black
Contacts	Phosphor bronze/nickel base, flash gold plated
Shell	Steel/nickel plated
Anchors	Stainless steel
Lock pin grounding fixture	Brass/tin plated

■Dimensions (Unit: mm)

XM3B-0942-112LS

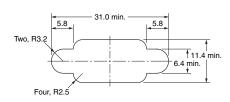


Mounting Holes (BOTTOM VIEW)



Note: Applicable board thickness: 1.6 or 1.0 mm.

Panel Cutout

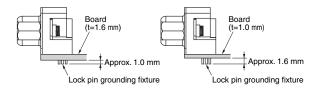


Note: Applicable panel thickness is 1.2 mm max.

Precautions

Precautions for Correct Use

 Insert the Connector into the board and then simultaneously dip-solder the Connector terminals and lock pins to the board.



Automatic Soldering

Automated Soldering Conditions (Jet Flow)

- (1) Soldering temperature: 250 ±5°C
- (2) Continuous soldering time: 5 ± 1 s max.

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