form XM3

9 poles corresponding to the surface mounting, 25-pole D-sub connector

- Since the surface of mounting type, it allows mounting of components to the substrate backside.
- It can be mounted onto a precise substrate by positioning boss of the substrate.
- Corresponding to the reflow mounting.



■ Explanation of terms

• SMT

SMT A, Surface Mount Technology stands for. Meaning of surface mount technology.

■ Ratings / performance

Rated current	3A
Rated voltage	AC300V
Contact resistance	25mΩ or less (DC20mV, at 100mA or less)
Insulation resistance	More 1,000MΩ (at DC500V)
Withstand voltage	AC1,000V 1min (in the following leakage current 1mA)
Insertion and removal durability	200 times
Operating temperature limit	- 55 ~ + 105 °C (no condensation or freezing)

■ Macteeisasi/ng

housing		LCP (UL94 V-0) / black
		Copper alloy / gold-plated
Contact the contact po	rtions Terminal part	Copper alloy / tin plating
shell		Steel / tin-plated
Fixture		Copper alloy / nickel-plated
Hold down		Copper alloy / tin plating

■ List

plug

shape				
accessories	No fasteners and mounting hole M3	No fasteners and mounting hole # 4-40 UNC	Fixture Yes · M3	Fixture Yes · # 4-40 UNC
format	Form XM3K- 💷 12-02	Form XM3K- 💷 12-03	Form XM3K- == 12-12	Form XM3K- == 12-13

socket

shape					
accessories	No fasteners and mounting hole M3	No fasteners and mounting hole # 4-40 UNC	Fixture Yes · M3	Fixture Yes · # 4-40 UNC	
format	Form XM3L- 💷 12-02	Form XM3L- == 12-03	Form XM3L- 💷 12-12	Form XM3L- == 12-13	

■ Format standard

Form XM3 0 2 3 8 5

09: 9-pole

25:25 pole

① type K: plug L: socket

② the number of poles ③ plated Specifications

1: gold-plated

4 terminal shape 2: L-shaped SMT terminal (5) specification of the fixture

02: No fixture

12: Yes fixture

(Mounting holes M3)

(Fixture screws M3) 13:

03: None fixture

Yes fixture

(Mounting holes # 4-40 UNC)

(Fixture screws # 4-40 UNC)

form XM3 D-sub connector plug

■ External dimensions

Form XM3K- == 12-02

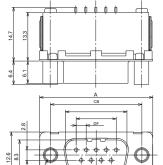
(No fastener-mounting holes M3) form

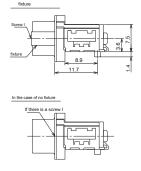
(No fastener-mounting holes # 4-40 UNC) form XM3K- □□ 12-12 (Yes fastener-M3) form XM3K-

□□ **12-13**

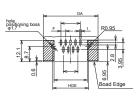
(Fixture Yes · # 4-40 UNC)







(Unit: mm)



(Tolerance ± 0.05)

Note. Pattern pitch tolerance of the substrate all ± over the body is 0.05. Please do not cumulative. Since * ϕ 1.7 is a positioning boss hole,

Be sure to design the by cormorants metal mask does not ride the solder in this part.

Dimension Table

format	Number of pole	s (N) A B		С	D	E	F	G	н	1	Fixture		
Form XM3K-0912-02										M3	None		
Form XM3K-0912-03	09	31.0	16.8	05.0.40.00	8.22		2.74	18.8	20.2	# 4-40 No UNC			
Form XM3K-0912-12				25.0 10.96						M3	Yes		
Form XM3K-0912-13										There # 4-40 UNC			
Form XM3K-2512-02										M3	None		
Form XM3K-2512-03	twenty five											# 4-40 No UNC	
Form XM3K-2512-12		53.0	38.9	47.0 33.12	30.36 2.76	30.36 2.76	40.8	42.2	M3	Yes			
Form XM3K-2512-13										There # 4-40 UNC			

■ type (® mark of the model is a standard stock models.)

No number of poles accessor	es fixture and mounting hole M3	No fasteners and mounting hole # 4-40 UNC	Fixture Yes · M3	Fixture Yes · # 4-40 UNC minimum packa	ging unit (Individual) *
9	⊗ form XM3K-0912-02	⊚ form XM3K-0912-03	◎ form XM3K-0912-12	⊚ form XM3K-0912-13	32
twenty five	® form XM3K-2512-02	⊚ form XM3K-2512-03	® form XM3K-2512-12	® form XM3K-2512-13	20

^{*} Packaging is the tray.

form XM3 D-sub connector socket

■ External dimensions (Unit: mm)

Shape XM3L- 🗆 12-02 (no fastener-mounting holes M3) form

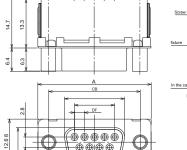
XM3L- 🗆 12-03.

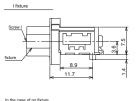
(No fastener-mounting holes # 4-40 UNC) form XM3L- □□ 12-12 (Yes fastener-M3) form XM3L-

□□ **12-13**

(Fixture Yes · # 4-40 UNC)









Printed circuit board processing dimension

Note. Pattern pitch tolerance of the substrate all \pm over the body is 0.05. Please do not

cumulative. Since * φ1.7 is a positioning boss hole, Be sure to design the by cormorants metal mask

Dimension Table

format	Number of pole	s (N) A B		С	D	E	F	G	Н	l I	Fixture	
Form XM3L-0912-02	- 09	31.0	16.4 25		8.22		2.74	18.8	20.2	M3	None	
Form XM3L-0912-03										# 4-40 No UNC		
Form XM3L-0912-12				25.0 10.96						M3	Yes	
Form XM3L-0912-13										There # 4-40 UNC		
Form XM3L-2512-02										M3	None	
Form XM3L-2512-03	twenty five			47.0 33.12 30.36 2.76 40.							# 4-40 No UNC	
Form XM3L-2512-12		53.0	38.5		40.8	42.2	M3	Yes				
Form XM3L-2512-13										There # 4-40 UNC		

■ type (* mark of the model is a standard stock models.)

mounting hole M3		No fasteners and mounting hole # 4-40 UNC	Fixture Yes · M3	Fixture Yes · # 4-40 UNC minimum packaç	ging unit (Individual) *
9	◎ form XM3L-0912-02	⊚ form XM3L-0912-03	⊚ form XM3L-0912-12	◎ form XM3L-0912-13	32
twenty five	® form XM3L-2512-02	⊚ form XM3L-2512-03	⊚ form XM3L-2512-12	@ form XM3L-2512-13	20

 $^{^{\}star}\,\mbox{Packaging}$ is the tray. No number of poles accessories fixture and

Please use it correctly

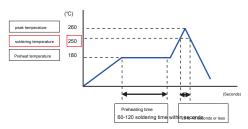
Precautions

For soldering conditions

- Reference reflow conditions

maximum temperature of 260 °C

Time 20 to 40 seconds or less



However, solder type, manufacturer, quantity and size of the substrate, it may vary depending on conditions such as the other of the mounting member, on the implementation status of the check, please use.

· For metal mask thickness at the time of the solder paste printing

Metal mask thickness at the time of the solder paste printing, we recommend the 0.15 ~ 0.18mm

However, solder type, manufacturer, quantity and size of the substrate, it may vary depending on conditions such as the other of the mounting member, on the implementation status of the check, please us

For the pin deformation

It causes a deformation and excessive load is applied to the terminal, since the solderability will be reduced at the time of implementation, dropping or rough handling Saketekuda Sai products. In addition, the connector insertion and removal of in a state that does not implement to the substrate Please do not. Cause terminal deformation

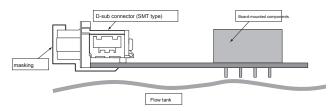
After reflow, the case where the automatic solder bath perform the soldering

Please perform the automatic solder from masking the positioning boss hole of the substrate tape in order to prevent the flux rise. The connector for mounting to the end face of the substrate, touch the solder side of the flow tank as in FIG. Therefore, if you use the flow tank, you need heat, rising on the flux measures.

· Mounting of the fixture

Form XM3K and form XM3L fixture 2 and 3 to the connector (form XM2Z, form XM4Z) can not be mounted.

In addition, the order to prevent the intrusion flux and solder to the mating portion of the connector, please go to automatic solder from the masking to the mating part in the tape. With respect to the masking tape, please use the appropriate Ma scan King tape by the customer.



Notes on operation

- mating work of the connector, plug and after confirming that there is no mating contact portions extreme shift, tilt to the socket, again that we engaged cans. Please go securely to the back mating connector. There is a loss of cormorants possibility contact reliability to be used in a state that is not able to mating as far as it will go.

Connector at the time of insertion and removal of, Do not give too much of the load again. The connector may be damaged, and cause contact failure. Mating plug, again that will go to the not pried as possible to the socket both. Deformation of the terminal and the housing, there is a risk of the housing cracking.

Connector to the mating contact part, please do not plugged the foreign matter such as the tip of the tweezers. Plating peeling, it will be the cause of terminal deformation. Connector Please do not mated to the opposite direction. Connector will be damaged

Notes on board mounting

Please note the amount of warpage of the board. If the warp amount is large, there is a possibility that the cause of the only bad soldering.

For storage

(1) storage location Please consider the dust and moisture. (2) storage is in the vicinity of the gas source, such as ammonia gas, sulfide gas

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