

Transfer High-resolution Video Signals with OMRON's DVI-compliant Digital Visual Interface Connectors.

- Used for both digital video (TMDS) and conventional analog (RGB) signals.
- OMRON's DVI Connector is an analog interface capable of up to 2.5-GHz bandwidths.
- Transfers broadband data up to 9.9 Gbps (dual link) to ensure full compatibility with advanced broadband applications.
- Shielded against EMI for high-speed data transfer.
- Digital and digital/analog models available.

RoHS Compliant

Terminology

● DVI

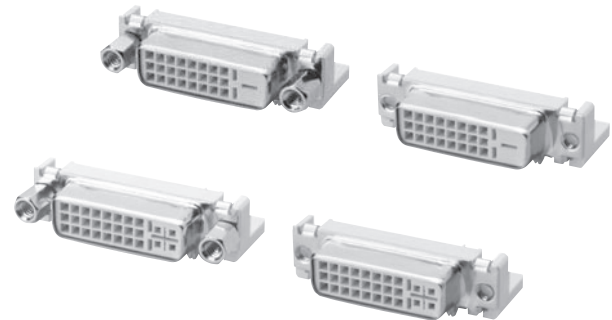
Abbreviation for Digital Visual Interface. One of the specifications for connecting a PC and display. Using the DVI, you can directly send digital signals from a PC to the display.

● TMDS

Abbreviation for Transition Minimized Differential Signaling. A digital transmission method of the display video signal used for the DVI.

● RGB

Three video signals of R (Red), G (Green) and B (Blue).



● bps

Abbreviation of Bits Per Second. Unit of data speed expressing the number of bits that can be transmitted in one second. 1 bps means 1 bit of data can be transmitted per second.

● EMI

Abbreviation of ElectroMagnetic Interference (noise).

Ordering Information

Type	Digital		Digital/Analog	
	Accessories	Inch screws, length = 5.8 mm	Accessories	Inch screws, length = 5.8 mm
Model	XM4M-2432-5012	XM4M-2432-1312	XM4M-2932-5012	XM4M-2932-1312
Appearance				

Ratings and Characteristics

Item	Type	Digital	Digital/Analog
Rated current		1.5 A	
Rated voltage		40 VAC	
Contact resistance		30 mΩ max. (at 20 mVDC, 100 mA max.)	
Insulation resistance		1,000 MΩ min. (at 500 VDC)	
Dielectric strength		500 VDC for 1 min (leakage current: 0.5 mA max.)	
Insertion durability		100 times	
Ambient operating temperature		- 20 to 85°C (with no condensation or icing)	

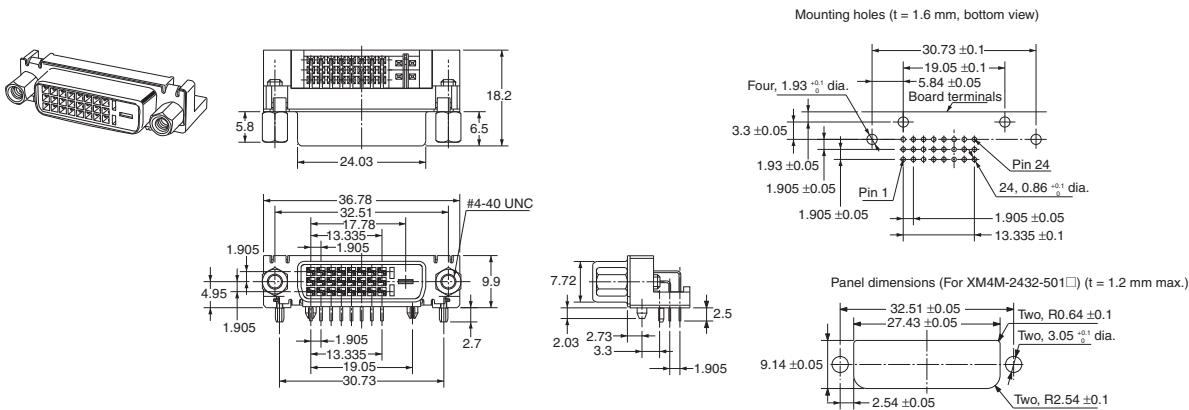
Materials and Finish

Housing	PBT (UL94 V-0)/natural	
Cover	PBT (UL94 V-0)/natural	
Contact	Mating end	Copper alloy/nickel base, gold plating
	Terminal	Copper alloy/nickel base, tin plating
Shell	Steel/nickel plated	
Anchors	Steel/nickel plated	
Grounding Fixture	Copper alloy/tin plated	

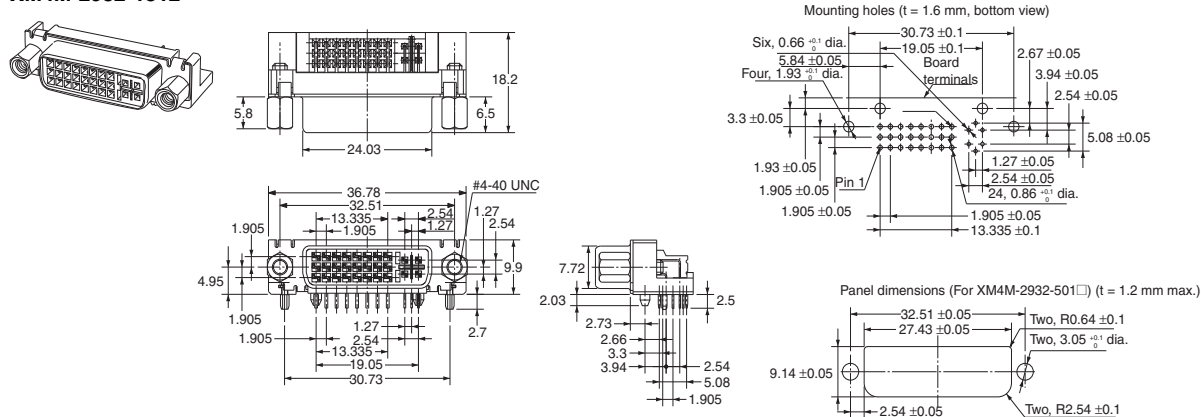
■ Dimensions

(unit: mm)

XM4M-2432-1312



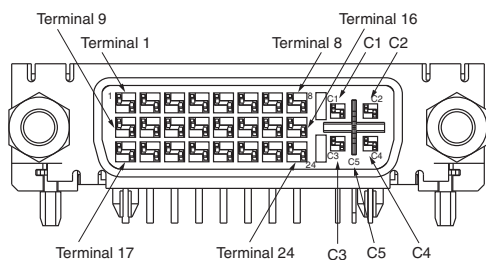
XM4M-2932-1312



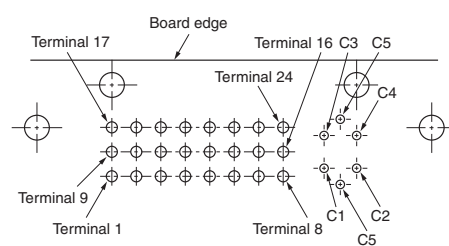
■ Terminal layout

Digital/Analog sharing type terminal Arrangement

Terminal layout viewed from the mating surface



Board terminal arrangement (BOTTOM VIEW)



Note: The digital type does not have C1 to C5.

■ Precautions

Precautions for Correct Use

Automated Soldering

Soldering

Automated Soldering Conditions (Jet Flow)

1. Soldering temperature: 250 ± 5°C
2. Continuous soldering time: Within 5 ± 1 s

Tightening torque for anchors

To install an anchor on the connector body, tighten it with 0.49 N·m. Also, use a proper size tool to do this work.

About panel mount

Use anchor 3 (XM4Z-002□ series) to lock connectors without anchors. (For anchor 3, refer to XM3-L/XM-2L/XM4K/XM4L.)

Mating

Do not connect the Connectors in the wrong direction, otherwise it may be damaged.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

Note: Do not use this document to operate the Unit.