

# HDMI Type-A Connectors

**molex**

Compact HDMI Type-A Connectors feature up to 48 Gbps bandwidth with 8K resolution display and various configurations, offering design flexibility to consumer, industrial and medical customers

## Features and Advantages

**Up to 48 Gbps bandwidth**  
Ideal for high-speed network applications

**Friction lock**  
Provides secure mating retention

**10,000 mating cycles**  
Delivers high durability

**Mylar surface**  
Facilitates SMT mounting

**0.75µm Gold plating thickness**  
Meets a variety of device application requirements

**Supports 8K resolution display**  
Delivers high-quality display

*HDMI Type-A Connector*

**Fully shielded design**  
Provides EMI/RFI protection

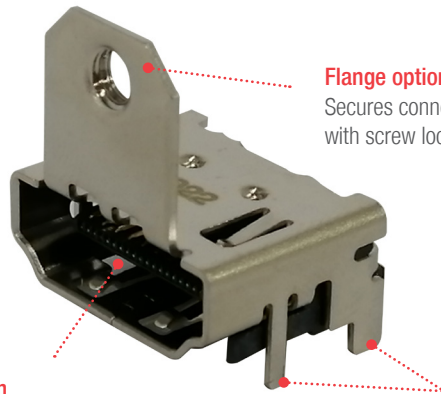
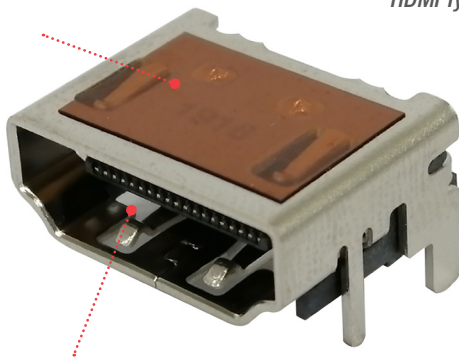
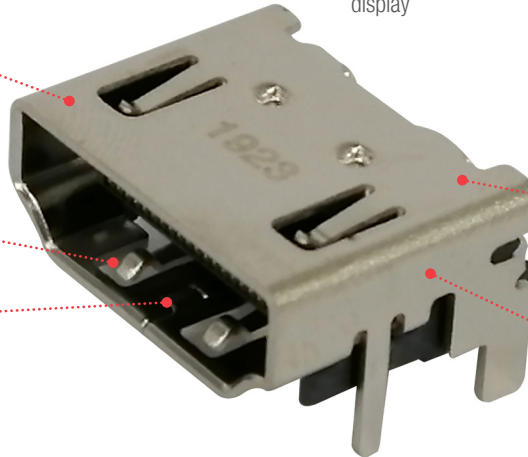
**Compatible with HDMI v1.4 and v2.1**  
Suits a variety of user-application requirements

*HDMI Type-A Connector*

**Flange option**  
Secures connection with screw lock

**Insert mold process design**  
Offers stable terminal coplanarity

**Availability in different lead lengths**  
Makes it suitable for a variety of PCB thicknesses



# HDMI Type-A Connectors



## Markets and Applications

### Consumer

- High-end televisions
- Meeting displays
- Graphic cards
- PCs/laptops
- Set-top box peripherals
- Gaming devices



PCs/Laptops



Medical Displays



Gaming Machines

### Industrial

- Security monitors
- Projectors
- Printers

### Medical

- Medical displays

### Connected Home

- Smart home systems

## Specifications

### REFERENCE INFORMATION

Packaging: Tape and reel, Tray  
 UL File No.: E106764 (plastics)  
 CSA File No.: N/A  
 Mates With: N/A  
 Terminal Used: Brass Alloy  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: Yes  
 Lead Free: Yes

### ELECTRICAL

Voltage (max.): 40V DC  
 Current (max.): 0.8A  
 Contact Resistance (max.):  
 Contact: 30 milliohms  
 Shell: 50 milliohms  
 Dielectric Withstanding Voltage:  
 Unmated: 500V AC  
 Mated: 300V AC  
 Insulation Resistance (min.):  
 Unmated: 100 Megohms  
 Mated: 10 Megohms (initial)

### MECHANICAL

Contact Retention to Housing: Insert molded type  
 Insertion Force to PCB: Zero insertion force  
 Mating Force (max.): 45N  
 Unmating Force:  
 9 to 40N (1 to 30 cycles)  
 4 to 40N (after 10,000 cycles)  
 Durability (min.): 10,000 cycles

### PHYSICAL

Housing: LCP, Black, UL94 V-0  
 Contact: Copper Alloy  
 Plating:  
 Contact Area — Gold flash over 0.75micron min.  
 Solder Tail Area — 0.05micron min. Gold (Au)  
 Underplating — 1.27micron min. Nickel (Ni)  
 Operating Temperature: -20 to +85°C

## Ordering Information

Series No.	Product	Design	Product Configuration	HDMI Standard / Bandwidth
<u>208658</u>	Receptacle	Standard	Top-Mount, Right-Angle	HDMI v2.1 / 48Gbps
<u>47659</u>			Vertical	HDMI v1.4 / 10.2Gbps

[www.molex.com/product/hdmi.html](http://www.molex.com/product/hdmi.html)

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