

Features:

- Smaller pitch 0.5mm with 67 circuits
- Used for both single and double-sided modules
- Faster data rate (support PCI Express 3.0, SATA 3.0 and USB 3.0)
- Various key options for M.2 module cards
- Lower profile and various heights available

Overview:

The M.2 series contains 67-pin mini card connectors with various keying options. This series saves 50% of overall costs by using gold fingers in place of mating plugs. Furthermore, 20% of space is saved compared to the Mini PCIe card connector. This connector's wide product offering is made specifically to meet many customer design needs.

Applications:

Storage

- Notebooks, tablets, desktops
- Network servers
- Hubs, routers, switches
- Portable gaming devices
- Portable mobile devices
- Smart TVs
- Devices that require SSDs

Wireless

- Wi-Fi
- WWAN (2G/3G/4G)
- Bluetooth
- WiGig
- GPS
- NFC
- GNSS



To learn more about M.2 connectors:

web: amphenolcanada.com

email: sales@amphenolcanada.com

Technical Requirements:

| Environmental | |
|---------------------------------------|---|
| Durability | EIA-364-9; * Option 1 - 25 cycles * Option 2 - 60 cycles Upon completion of cycles the sample must meet all visual and electrical performance requirements |
| Insertion Force | 20 N (2.04 KgF, 1 Newton = 1 Kg* m/s ²) max. EIA-364-13, Method A |
| Shock | * 250 G (notebook) and 285 G (tablet) * At 2 ms half sine * On all six (6) axis |
| Vibration | EIA-364-1000 Test group 3, EIA-364-28 |
| Operating Temperature | -40°C to 80°C |
| Environmental Test Methodology | EIA-364-1000 Test group 1, 2, 3, 4 |
| Useful Field Life | Three (3) years |

| Electrical | |
|-------------------------------------|---|
| Low Level Contact Resistance | EIA-364-23 * 55 mΩ max. (initial) per contact * 20 mΩ max. change allowed |
| Insulation Resistance | EIA-364-21 * >5 x 10 ⁸ Ω @ 500 V DC |
| DWV | EIA-364-20 * >300 V AC (RMS) @ sea level |
| Current Rating | * 0.5 A/Power contact (continuous) * The temperature rise above ambient shall not exceed 30°C * The ambient condition is still air at 25°C * EIA-364-70 Method 2 |
| Voltage Rating | 50 V AC per contact |
| Materials | |
| Contact: Receptacle | Copper alloy with gold plating sufficient to meet all mechanical and environmental requirements |
| Contact Finish: Receptacle | Must be compatible with lead-free soldering process |
| Housing | Complies with UL 94 V-0. Must be compatible with lead-free soldering process |

Ordering Information:

MDT - XXX - X - XX - 001

Connector Height

580 - 5.80 mm
420 - 4.20 mm
320 - 3.20 mm
275 - 2.75 mm
245 - 2.45 mm
180 - 1.80 mm

Contact Plating

01 - 0.30 μ" Au
02 - 0.15 μ" Au
03 - Gold flash

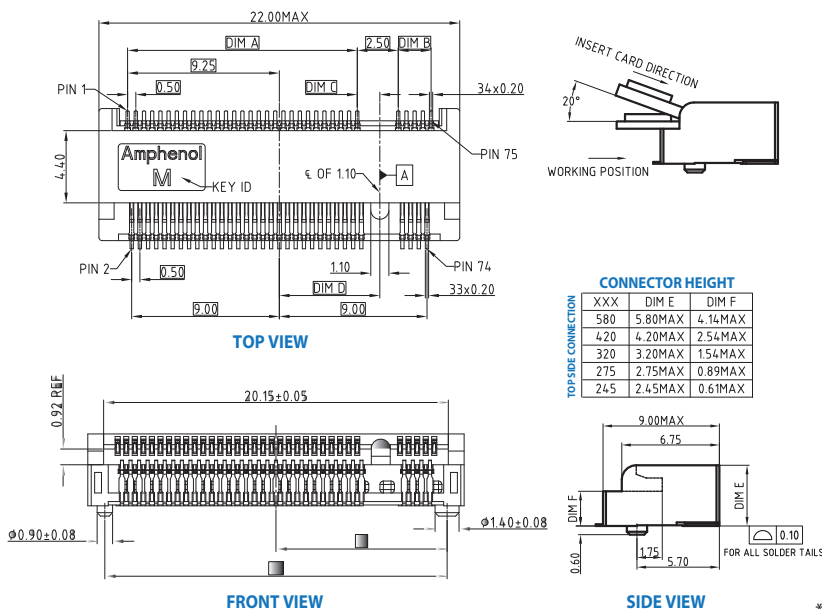
Connector Key ID (Note 1)

A - Key A
B - Key B
E - Key E
M - Key M
...

Note 1:
Connector Key ID is identical with Module Card Key ID

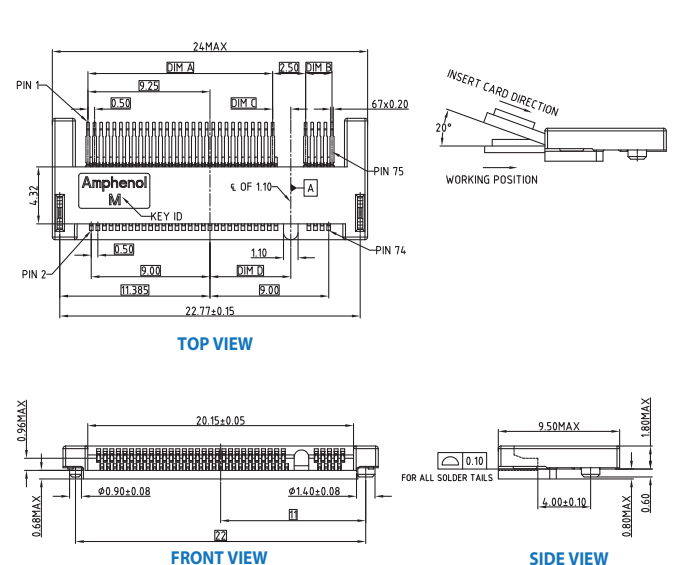
Dimensions:

TOP SIDE CONNECTION:



All drawings are measured in millimeters (mm).

MID LINE CONNECTION:



* Please visit amphenolcanada.com to find drawings for other products in this series.