

# HCMTD connector

HCMTD is full shielded differential solution designed for high speed automotive Ethernet. This new interface is capable of transmitting high speed data up to 15 GHz (20 Gbps) in a robust automotive grade connection. The high performance modular design of the system enables more flexibility in the quest of providing next generation devices.

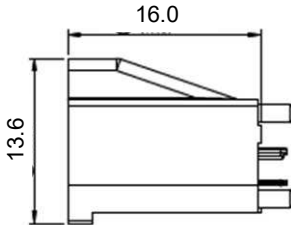


## [PRODUCT FEATURE]

- Automotive grade Ethernet solution complied with LV214 / USCAR
- Modular package
- High performance up to 15 GHz / 20 Gbps
- 14 Key, 14 Color
- Power over Ethernet (POE) feature
- STP / UTP / SPP cable possible
- Small and robust package

# HCMTD PLUG for P.C.B.

**HCMTD PLUG**  
Vertical  
for P.C.B. (1x1)



### MATERIAL

- Insulator : Thermo-plastic
- Contacts : Copper alloy
- Shell : Zinc alloy

### CONTACT PLATING

- Contact area : Gold Flush
- Solder tails area : Gold Flush

### ELECTRICAL

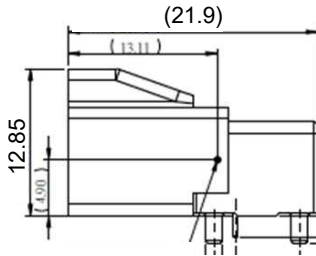
- Impedance : 100  $\Omega$
- Frequency : Up to 15 GHz
- Insulator Resistance : 1000 M $\Omega$  Min. at 100 V DC
- Withstanding Voltage : AC 250 Vrms Min.
- Voltage Rating : AC 100Vrms
- Current Rating : 1.5 A Max.
- Contact Resistance : 10 m $\Omega$  Max. at 20 mV Max.
- Operation Temp. Range : -40 degree to +105 degree

### MECHANICAL

- Mating cycles : 25 Cycles Max.
- Engagement force : 40 N Max.
- Disengagement force : 5 N Min. 25 N Max.

# HCMTD PLUG for P.C.B.

**HCMTD PLUG R/A  
for P.C.B. (1x1)**



**MATERIAL**

- Insulator : Thermo-plastic
- Contacts : Copper alloy
- Shell : Zinc alloy

**CONTACT PLATING**

- Contact area : Gold Flush
- Solder tails area : Gold Flush

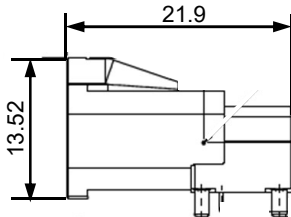
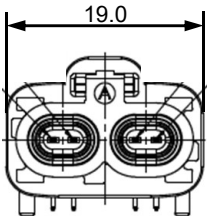
**ELECTRICAL**

- Impedance : 100 Ω
- Frequency : Up to 15 GHz
- Insulator Resistance : 1000 MΩ Min. at 100 V DC
- Withstanding Voltage : AC 250 Vrms Min.
- Voltage Rating : AC 100 Vrms
- Current Rating : 1.5 A Max.
- Contact Resistance : 10 mΩ Max. at 20 mV Max.
- Operation Temp. Range : -40 degree to +105 degree

**MECHANICAL**

- Mating cycles : 25 Cycles Max.
- Engagement force : 40 N Max.
- Disengagement force : 5 N Min. 25 N Max.

**HCMTD PLUG  
R/A  
for P.C.B. (1x2)**



**MATERIAL**

- Insulator : Thermo-plastic
- Contacts : Copper alloy
- Shell : Zinc alloy

**CONTACT PLATING**

- Contact area : Gold Flush
- Solder tails area : Gold Flush

**ELECTRICAL**

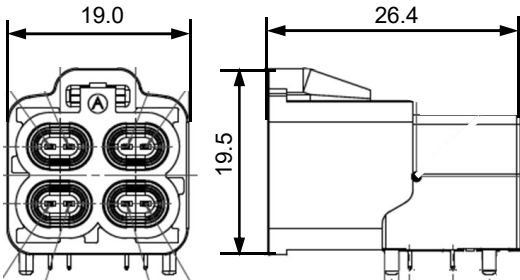
- Impedance : 100 Ω
- Frequency : Up to 15 GHz
- Insulator Resistance : 1000 MΩ Min. at 100 V DC
- Withstanding Voltage : AC 250 Vrms Min.
- Voltage Rating : AC 100 Vrms
- Current Rating : 1.5 A Max.
- Contact Resistance : 10 mΩ Max. at 20 mV Max.
- Operation Temp. Range : -40 degree to +105 degree

**MECHANICAL**

- Mating cycles : 25 Cycles Max.
- Engagement force : 40 N Max.
- Disengagement force : 5 N Min. 25 N Max.

## HCMTD for P.C.B.

HCMTD PLUG R/A  
for P.C.B. (2x2)



### MATERIAL

- Insulator : Thermo-plastic
- Contacts : Copper alloy
- Shell : Zinc alloy

### CONTACT PLATING

- Contact area : Gold Flush
- Solder tails area : Gold Flush

### ELECTRICAL

- Impedance : 100  $\Omega$
- Frequency : Up to 15 GHz
- Insulator Resistance : 1000 M $\Omega$  Min. at 100 V DC
- Withstanding Voltage : AC 250Vrms Min.
- Voltage Rating : AC 100 Vrms
- Current Rating : 1.5A Max.
- Contact Resistance : 10 m $\Omega$  Max. at 20 mV Max.
- Operation Temp. Range : -40 degree to +105 degree

### MECHANICAL

- Mating cycles : 25 Cycles Max.
- Engagement force : 40 N Max.
- Disengagement force : 5 N Min. 25 N Max.

## HCMTD for CABLE



HCMTD JACK  
for Cable (1x1)



HCMTD JACK  
for Cable (1x2)



HCMTD JACK  
for Cable (2x2)



HCMTD PLUG  
for Cable (1x1)

### MATERIAL

- Insulator : Thermo-plastic
- Contacts : Copper alloy
- Shell : Zinc alloy

### CONTACT PLATING

- Contact area : 6 $\mu$ m Gold

### ELECTRICAL

- Impedance : 100  $\Omega$
- Frequency : Up to 15 GHz
- Insulator Resistance : 1000 M $\Omega$  Min. at 100 V DC
- Withstanding Voltage : AC 250 Vrms Min.
- Voltage Rating : AC 100 Vrms
- Current Rating : 1.5 A Max.
- Contact Resistance : 10 m $\Omega$  Max. at 20 mV Max.
- Operation Temp. Range : -40 degree to +105 degree

### MECHANICAL

- Mating cycles : 25 Cycles Max.
- Engagement force : 40 N Max.
- Disengagement force : 5 N Min. 25 N Max.