

# **NETBridge™ Automotive Ethernet Connector System**

# COMPLIANT WITH USCAR-2 SPECIFICATIONS; IDEAL FOR AUTOMOTIVE APPLICATIONS

NETBridge<sup>™</sup> Automotive Ethernet Connector System is designed for the harsh automotive environment and can transmit up to 100Mb/s and 1Gb/s according to IEEE 100BASE-T1 and 1000BASE-T1. These automotive grade Ethernet connection system uses twisted-pair cables to transmit data. NETBridge<sup>™</sup> is developed in accordance with USCAR-2, VDAAK LV214 and ISO 8092-2.

- 0.50mm x 0.40mm tab terminal system
- Temperature range -40°C to +100°C in sealed and unsealed configuration
- Waterproof version present in development
- CCPA for secondary lock of contact carrier assembly
- Optional CPA for secondary lock in mated condition



## **FEATURES**

- Automotive grade Ethernet application
- Scalable port options with 1x1 to 1x7 ports for connector and 1x1, 1x5 for inline adaptor
- Touch proof design
- Mechanical and visible color coding
- Available in shielded and unshielded cable options
- Mechanically robust design
- CCPA for secondary lock of contact carrier

#### **BENEFITS**

- Offers higher data rate transmission
- Design flexibility
- Contact pin protection
- Avoids mismating
- Supports different EMC behaviors
- Easy installation
- Ensures proper connector assembly

# **NETBridge™ Automotive Ethernet Connector System**

# **TECHNICAL INFORMATION**

## **MATERIAL**

• Housing: High temperature thermoplastic, UL 94V-0

■ Contacts: Brass

■ Shell: Phosphor Bronze

## **MECHANICAL PERFORMANCE**

• Extraction Force without Locking Latch: 75N max.

• Extraction Force: 110N max.

• Durability: 10 cycles

#### **ELECTRICAL PERFORMANCE**

• Low Level Contact Resistance:  $15m\Omega$  max.

• Contact Current Rating: 3A

• Dielectric Withstanding Voltage: 500VAC

#### **PACKAGING**

Tray

■ Tape & Reel

## **SPECIFICATION**

■ Amphenol Product Specification: NETBridge™ series

## **ENVIRONMENTAL**

■ Humidity: 40 cycles between -40°C to +100°C. Relative Humidity 0% to 95%

Vibration: V1 Class

■ Thermal Shock: 100 cycles between -40°C to +100°C

# **APPROVALS AND CERTIFICATION**

■ USCAR-2 Compliant

• IATF Production Compliant

RoHS

■ REACH/SVHC

Low Halogen

# **TARGET MARKETS/APPLICATIONS**



Body Control, Safety, Security, and Comfort Advanced Driver Assistance Systems (ADAS) Infotainment

# **PART NUMBERS**

Descrption	Part Numbers
NETBridge™ 1X1, DIP, 100Mbps, No ESD, Code 1	NTBM11R0U01110T
NETBridge <sup>™</sup> 1X2, DIP, 100Mbps, No ESD, Code 1	NTBM12R0U01110T
NETBridge <sup>™</sup> 1X3, DIP, 100Mbps, No ESD, Code 1	NTBM13R0U01110T
NETBridge <sup>™</sup> 1X4, DIP, 100Mbps, No ESD, Code 1	NTBM14R0U01110T
NETBridge <sup>™</sup> 1X5, DIP, 100Mbps, No ESD, Code 1	NTBM15R0U01110T
NETBridge <sup>™</sup> 1X6, DIP, 100Mbps, No ESD, Code 1	NTBM16R0U01110T
NETBridge™ 1X7 DIP, 100Mbps, No ESD, Code 1	NTBM17R0U01110T
NETBridge™1X1 Ethernet adaptor w ground shield connector	NTBA1120002T
NETBridge™1X5 Ethernet adaptor w ground shield connector	NTBA1520002T