# CATEGORY 5E MT-SERIES UNSCREENED KEYSTONE JACKS

Category 5e Unscreened Jack, Black

# **KEY FEATURES**

- Exceeds TIA-568-C.2 component performance specifications
- Supports TIA-568-C.2 category 5e 100 meter channel performance
- Slim profile for the highest density applications
- Improved wire retention and ease of termination with rear 110 type contacts
- Easy-to-read T568A/B wiring scheme color-coded label
- Compatible with Signamax screened snap-in patch panels and work area faceplates
- Circuit identification icons, dust covers, and 110 protection caps included in kit

The Signamax Category 5e MT-Series Unscreened Keystone Jacks have been designed to meet the need for today's highbandwidth applications. These connectors are slim in profile for the highest density applications and have the ability to mount either color-coded icons for service identification or dust covers to protect unused jacks from dust and other contaminants.

Special design features allow these jacks to be terminated with a standard 110 single-position tool or with the Signamax fourpair tool. The contact design provides enhanced plug-to-jack connection integrity, protects against damage caused by insertion of 4- or 6-position plugs, and is rated for a minimum of 750 plug insertions providing for the highest level of system reliability.

# SPECIFICATIONS

# TRANSMISSION PERFORMANCE

 ANSI/TIA-568-C.2: meets or exceeds category 5e (1–100 MHz) component specifications

# TRANSMISSION MEDIA

• Unscreened twisted pair (U/UTP)

## ЈАСК ТҮРЕ

• 8p8c (8-position, 8-contact) "RJ45" style

# WIRING SCHEME (See Figure 1)

- ANSI/TIA-568-C.2: T568Å & T568B
- ISO/IEC 11801 2nd Ed.: 8-position pin/pair assignment (1-2/3-6/4-5/7-8)

#### WIRE GAUGE

• 22 to 24 AWG (0.644 to 0.511 mm)

## ELECTRICAL

- Insulation Resistance: Min 500 MOhm @ 100 Vdc
- Dielectric Withstanding Voltage:
- 1,000 Vdc/ac peak contact-to-contact @ 60 Hz for 1 min
- Spring Wire Contact Resistance: Max 20 mOhm
- IDC Contact Resistance: Max 2.5 mOhm
- Current Rating: See Figure 2

## CONSTRUCTION

- *Housing:* High impact thermoplastic, UL94V-0 fire retardant
- Jack Spring Wire: Phosphor bronze alloy plated with 50 µin of gold over 70 to 100 µin of nickel
- $\ensuremath{\overline{\textit{IDC:}}}$  110 type, phosphor bronze alloy with 100  $\mu\text{in}$  100% tin alloy

# MECHANICAL

• Total Contact Force: Min 800 g for 8 wire leads

Figure 2: Current Rating

€ 2.5

2.0 1.5

1.0 0.5

0.0

Current-Carring Capacity

- Retention: 50 N (11 lbf) for  $60 \pm 5$  s
- Mating Cycle Life: Min 750 cycles

#### FOOTPRINT

Standard keystone footprint

#### **MOUNTING DIMENSIONS:**

• 1.18" D x 0.67" W x 0.76" H (30.0 mm x 16.9 mm x 19.3 mm)

#### **ENVIRONMENTAL CONDITIONS**

- Operating Temperature: 14 °F to 140 °F (-10 °C to 60 °C)
- Storage Temperature: -40 °F to 158 °F (-40 °C to 70 °C)
- Operating RH: 93% Max (non-condensing)

#### COMPLIANCE

• ANSI/TIA-568-C.2, IEC 60603-7, FCC Part 68 Subpart F, UL 94V-0

#### APPLICATIONS

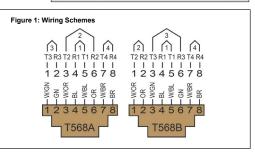
• X.21, V.11, S0, ISDN, CSMA/CD 10BASE-T, 100BASE-TX, 00BASE-T4, 100BASE-T2, 1000BASE-T, 10GBASE-T (up to 25 m (82 ft)), TR 4/16/100, 100BASE-VG, ATM LAN 25/51/155, TP-PMD

## WARRANTY

• 5 - Year Limited Component







0 10 20 30 40 50 60 70 80

Ambient Temp. of Connector (°C)

