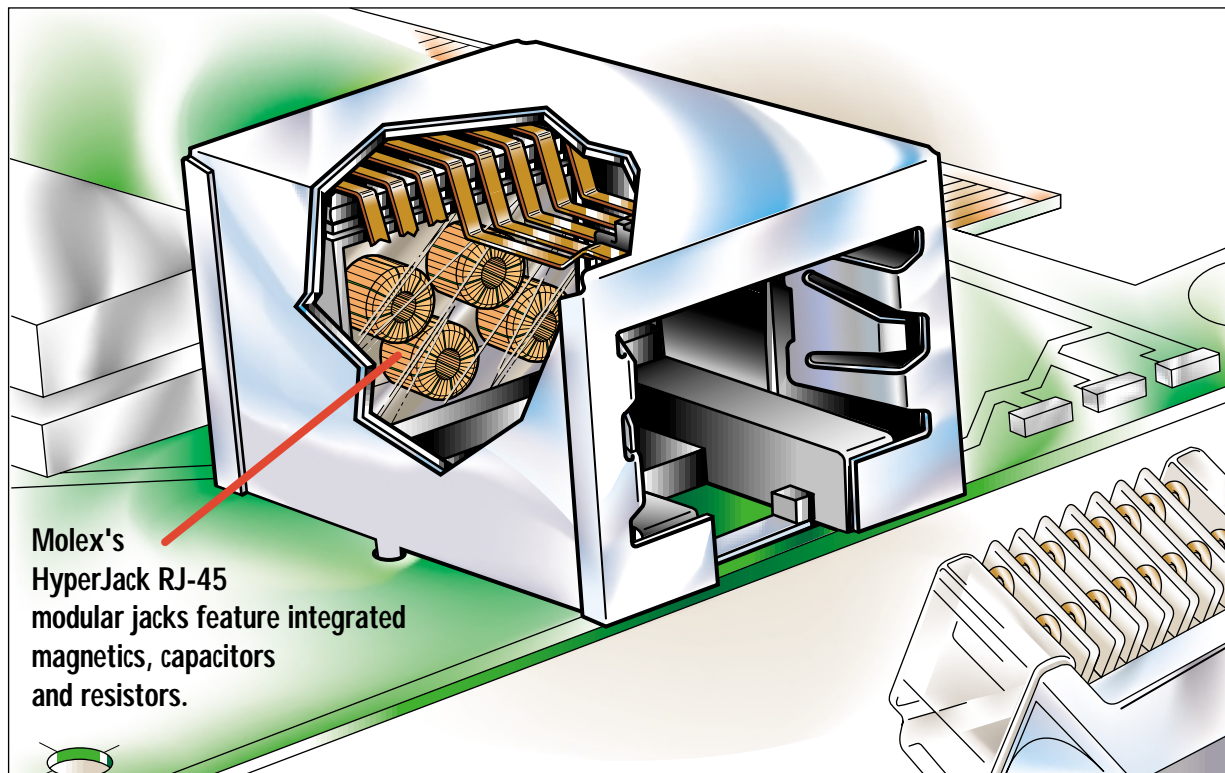


Features and Benefits

- Trade name for Molex, RJ-45 Jack that includes wire wound components (magnetics)
- Used for local area networks (LANs) or wide area networks (WANs) with Ethernet 10 Base T or 100 Base T characteristics
- Transformers are used in every port to enable series signal isolation of the transmission lines
- Common mode chokes are incorporated in the same transformer core to achieve a better signal-to-noise ratio
- Magnetics are used for common mode noise rejection, DC insulation of cable side versus the board side and possible transforming of LH signal
- Resistors and/or capacitors are incorporated to terminate noise from the non used pair
- An overmolded installation box in the jack is used to mount, solder, pot magnetics, resistors, and capacitors during high volume production



FEATURES AND SPECIFICATIONS

Features and Benefits

- Integrated magnetics, capacitors and resistors for space savings and reduced components on the motherboard
- Eases logistics
- Flexible magnetic design adapts to physical specifications from any vendor
- EMI/RFI protection includes common mode chokes
- Full magnetic performance suitable for UTP and STP applications
- Symmetrical RX/TX design can be used on PCB or hub side

Reference Information

Product Specification: PS-85533-017
 Packaging: Tray
 Mates with: FCC 68 Plugs
 Designed in: Millimeters

Electrical

Voltage: 125V
 Current: 1.5A
 Contact Resistance: 20mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 500 MΩ min.
 OCL (TX, RX): 400μH min.

Electrical (continued)

Insertion Loss (TX, RX): 0.1 to 100 MHz -1dB max.
 Return Loss (TX, RX):
 0.5 to 30 MHz -18 dB min.
 40 MHz -15.5 dB min.
 50 MHz -13.6 dB min.
 60 to 80 MHz -12 dB min.
 Common Mode Rejection (TX, RX):
 1 to 30 MHz -50 dB min.
 60 MHz -37 dB min.
 100 MHz -28 dB min.

Crosstalk TX-RX (NEXT):

1 to 30 MHz -42 dB min.
 60 MHz -38 dB min.
 100 MHz -35 dB min.

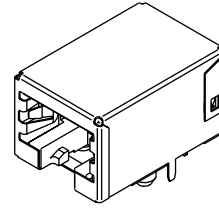
Isolation (Hi-Pot): 1500V AC or 2250V DC

Physical

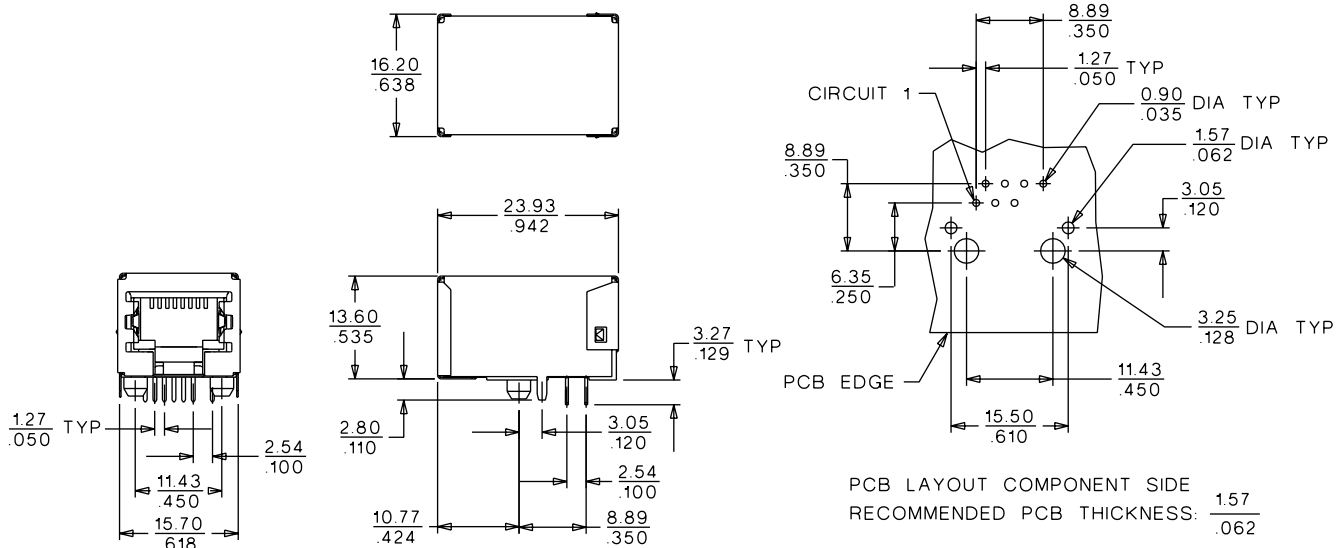
Housing: Black polyester, UL 94V-0
 Contact: Phosphor Bronze
 Plating: Contact Area—Post plate 1.27 to 1.52μm (50 to 60μ") Gold
 Solder Tail Area—1.90μm (75μ") min. Tin/Lead
 Underplating—Nickel
 Operating Temperature: -40 to +80°C

molex® Modular Jack
HyperJack™

85533
Right Angle
Shielded



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION

Circuits	Loaded Contacts	Order No.
8	8	85533-0002

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 Fax: 630-969-1352

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