# ♦ Gigibit Modular Jack Dip Type

Ordering Information:

RJR21- * 8 A 2 4 3 2 0
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1.Plating Options
A:50u" Gold in Contact Area

Physical:

- ♦ Housing & Overmold & Coil Box
  High Temp Thermoplastic,UL94V-0 Rated,
  Black Color
- ♦ Terminal
  Copper Alloy
- ♦ Terminal Plating
  Gold Plating on Contact Area
  Tin Plating on Solder Tails
  Nickel Underplating Overall
- ♦ Teil
  Copper Alloy
- ♦ Teil Plating
  Tin Plating on Solder Tails
  Nickel Underplating Overall
- ♦ Shell
  Copper Alloy
- ♦ Shell Plating
  Tin Plating on Solder Tails
  Nickel Underplating Overall

Mechanical Specifications:

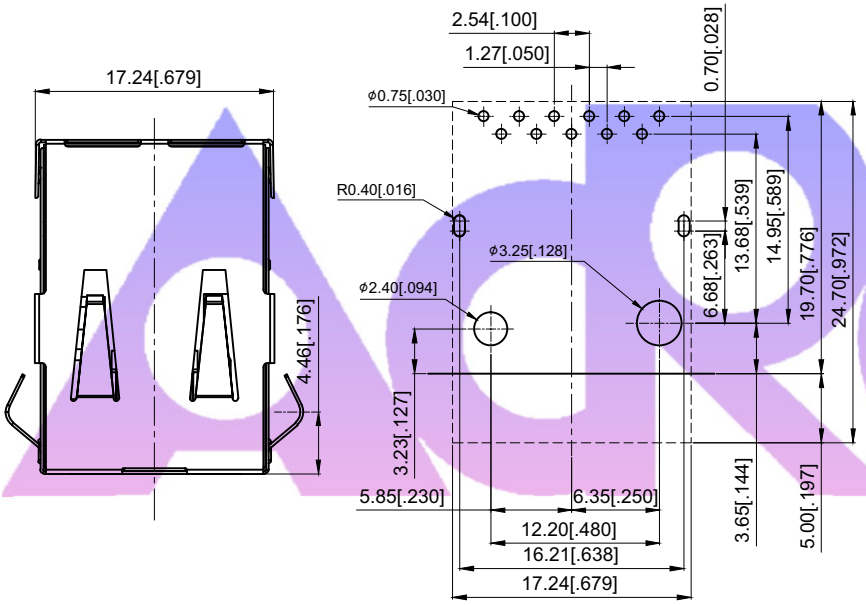
- ♦ Mate Force
  22N Max.
- ♦ Durability
  200 Cycles
- ♦ Operating Temperature Rating
  0°C to +70°C

Electrical Specifications:

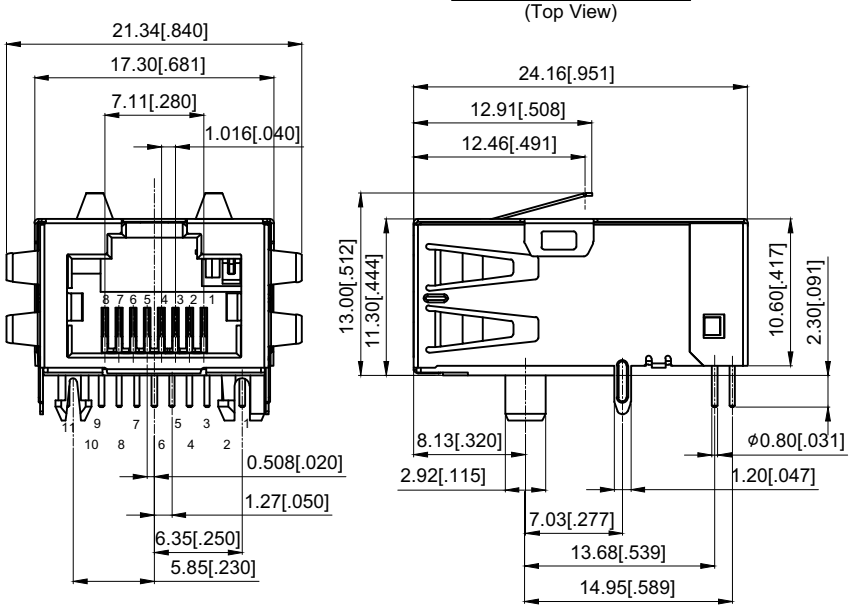
- ♦ Rated Voltage
  30V DC
- ♦ Rated Current
  1.5A DC
- ♦ Contact Resistance
  30 Milliohms Max. Initial
- ♦ Dielectric Withstanding Voltage
  500V per Second Max. Ramp
- ♦ Insulation Resistance
  1000 Megohms Min.

Magnetic Electrical Specifications:

Impedance:100 ohms
Transmit Open Circuit Inductance: 350uH Min. @100kHz
Turns Ratio(Board:Cable): TX 1:1 RX 1:1
Transmit Bidirectional all 4 Pairs
Recieve Bidirectional all 4 Pairs

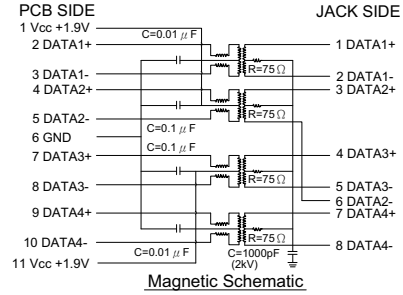



Recommended PCB Layout
(Top View)




Dielectric:Cut off Current 1mA Max. in 2250 VDC or 1500 VAC/ 1 Minute

| | Test Item | Frequency | Specification Requirement |
|---|---|---|---|
| 1 | Insertion Loss | 100KHz | 1.2 dB MAXIMUM |
| | | 1~125MHz | 0.2+0.002*(f MHz)^1.4 dB MAXIMUM |
| 2 | Return Loss | 0.1~30MHz | 16 dB MINIMUN |
| | | 30~60MHz | 10-20*LOG$_{10}$(f MHz/60) dB MINIMUN |
| | | 60~100MHz | 10 dB MINIMUN |
| 3 | Common Mode to Common Mode Rejection | 2~20MHz | 35 dB MINIMUN |
| | | 20~200MHz | 15-20*LOG$_{10}$(f MHz/200) dB MINIMUN |
| 4 | Common Mode to Differential Mode Conversion | 2~15MHz | 40 dB MINIMUN |
| | | 16~200MHz | 15-20*LOG$_{10}$(f MHz/200) dB MINIMUN |
| 5 | Near End Cross-Talk | 1~15MHz | 35 dB MINIMUN |
| | | 16~100MHz | 24 dB MINIMUN |




Magnetic Schematic