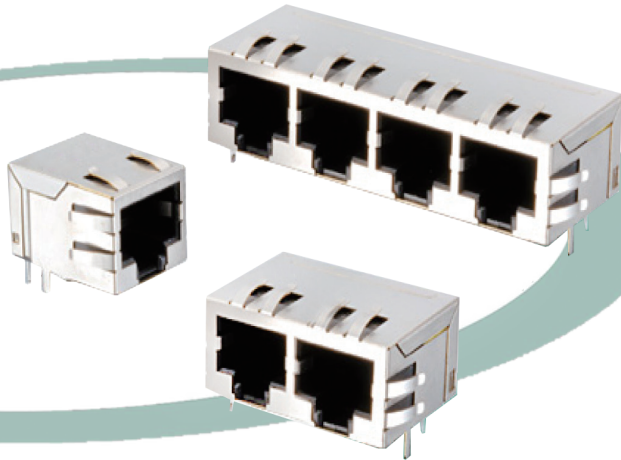


KRF SERIES



FEATURES AND BENEFITS

- Available 1*1, 1*2 and 1*4 ports
- Optional LED as Power/Activity indicators
- Optional 10/100 or 1 Gigabit Magnetics
- High performance for maximum EMI suppression
- Appropriate for high-speed Ethernet application
- HI-POT and functionality are 100% electrically tested
- Minimum of 750 insertion cycles

ELECTRICAL AND PERFORMANCE SUMMARY

- Internal magnetics options available.
- Meet or Exceed IEEE 802.3 and IEEE 802.3ab standard
- 350uH minimum OCL with 8 mA bia
- Minimum 1500Vrms isolation per 802.3 requirements.

APPLICATIONS

DESKTOP PC, SERVER, HUB, SWITCH, LCD TV, STB, AMPLIFIER, AV CENTER, POS, PRINTER, PROJECTOR, SECURITY CAMERA

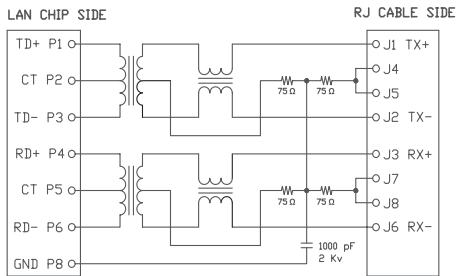
GENERAL SPECIFICATION

| Product Type Features | | Housing Related Features | |
|----------------------------|--------------------------|-----------------------------|-------------------|
| Tab Type | Tab Down | Material | PBT |
| PCB Mount Angle | Side Entry (Right Angle) | Housing Flammability Rating | UL 94V-0 |
| PCB Mount Style | Through Hole | Color | Black |
| Number of Port | 1 / 2 / 4 | Contact Related Features | |
| Shielded | With / Without | Material | Phos-Bronze |
| Number of Position | 8 | Contact Area Plating | Hard Gold |
| Number of Contact | 8 | Solder Area Plating | Tin |
| LED | None | Magnetic Related Features | |
| Transformer | Yes | Transformer Speed | 10 /100/1000 |
| Shielding Related Features | | Dimension (mm) | |
| Material | Copper Alloy | Length | 21.60 |
| Plating | Nickel | Width | 15.90/31.16/58.60 |
| EMI Finger | With / Without | Height | 13.80 |
| Number of PCB Ground Tabs | 2 | | |
| Ground Pin Position (mm) | After Peg 3.05 | | |

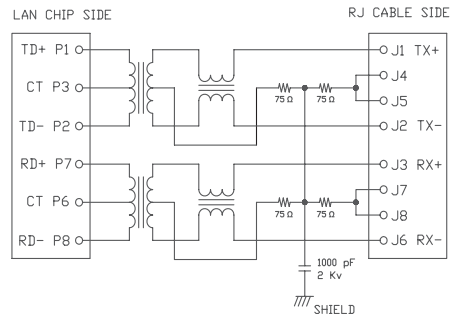


10/100 Mbps TYPICAL SCHEMATIC

D12 Type



D31 Type

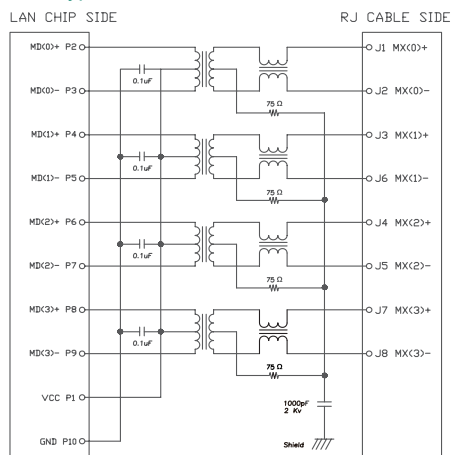


10/100 MHz Electrical Specification@25°C

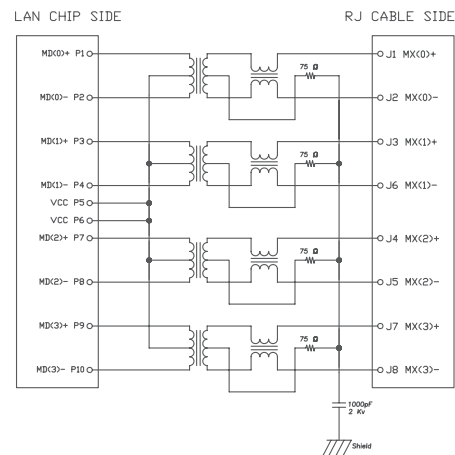
| Item | TR | LX | DCR | Hi Pot | Insertion Loss | Return Loss | Cros Talk | Common Mode Rejection |
|-------------------|----------|-----------------------------|-----------------|-----------------|----------------|-------------------------------|-----------|-----------------------|
| Part No | | 100KHz, 100mV, 8mA, DC Bias | (Every RJ Pair) | Input to Output | 0.3~100 MHz | 1~30 MHz 30~60 MHz 60~80MHz | 1~100 MHz | 1~100MHz |
| KRF-01P-1-D12-170 | 1 : 1±3% | 350 uH Min | 1.2 ohm Max | 1500VAC for 60s | -1.0dB Max | -20dB Min -15dB Min -10dB Min | -30dB Min | -30dB Min |
| KRF-02P-1-D31-170 | 1 : 1±3% | 350 uH Min | 1.2 ohm Max | 1500VAC for 60s | -1.0dB Max | -20dB Min -15dB Min -10dB Min | -30dB Min | -30dB Min |
| KRF-04P-1-D31-170 | 1 : 1±3% | 350 uH Min | 1.2 ohm Max | 1500VAC for 60s | -1.0dB Max | -20dB Min -15dB Min -10dB Min | -30dB Min | -30dB Min |

10/100/1000 Mbps TYPICAL SCHEMATIC

H33 Type



H11 Type



1000 MHz Electrical Specification@25°C

| Item | TR | LX | DCR | Hi Pot | Insertion Loss |
|-------------------|------------------------------|-----------------------------|-------------------|----------------------|-------------------------------|
| Part No | | 100KHz, 100mV, 8mA, DC Bias | (Every RJ Pair) | Input to Output | 0.3~100MHz 100~125MHz |
| KRF-01P-1-H33-170 | 1 : 1±3% | 350 uH Min | 1.2 ohm Max | 1500VAC for 60s | -0.8dB Max -1.2dB Max |
| | 1 : 1±3% | 350 uH Min | 1.2 ohm Max | 1500VAC for 60s | -0.8dB Max -1.2dB Max |
| KRF-02P-1-H33-170 | Common Mode Rejection | Return Loss | Cross Talk | | |
| | 300~100MHz | 1~10 MHz 30MHz 60~100MHz | 1~10 MHz | 30~60 MHz 60~100 MHz | |
| KRF-04P-1-H11-170 | -30dB Min | -20dB Min | -16dB Min | -12dB Min | -40dB Min -35dB Min -30dB Min |
| | -30dB Min | -20dB Min | -16dB Min | -12dB Min | -40dB Min -35dB Min -30dB Min |