

J-Tech Product Bulletin

Quadrax Contact System

***J-Tech now offers Quadrax Contacts to our expanding High-Speed RF product lines ***



Product Features:

- 1. Quadrax contacts consist of a size #8 outer contact geometry with four strategically spaced inner contacts forming two 100 Ohm matched impedance differential pairs with excellent 360 degree shielding.
- 2. Quadrax contacts provide high data transfer rates, low power consumption, and excellent EMI compatibility.
- 3. Ideal for Harsh Environment applications when used in conjunction with a Conesys MIL-DTL-38999 Series III, EN2997, and ARINC type connectors to achieve Ethernet 100 Base-T and Gigabit Ethernet 1000 Base-T signal capabilities.
- 4. Both pin and socket contacts feature a protruding alignment key to properly orient the contact within the connector cavity.
- 5. Termination type is offered in Crimp or PC tail.

Contact Performance:

- 1. One contact completes a full duplex 100Mbps Ethernet link and exceeds ISO/IEC 11801 Category 6 requirements:
 - a. NEXT Cross-Talk: >46 db @ 250 MHz
 - b. <u>Return Loss:</u> >16 db @ 250 MHz
 - c. Shield Effectiveness: >36 db @ 80 MHz
- 2. Typical Electrical Performance:
 - a. Bandwidth: Up to 3 Gigahertz
 - b. Data Rate: Exceeding 2 Gbits/sec
 - c. Voltage Rating: 500 Vrms @ sea level
 - d. <u>Dielectric Withstanding Voltage:</u> Up to 1000VAC rms between inner contacts and up to 500 VAC rms between inner and outer contacts.
 - e. Characteristic Impedance: 100 ± 10 Ohms
- 3. Operating Temperature: -65°C to +200°C
- 4. Gold plating of 50 micro-inches minimum to ensure low contact-to-contact resistance even after 500 matings.





J-Tech Quadrax Application Photos







