# SPACE Micro-D Connectors

## 10 Gb/s SOLUTIONS

#### FOR SPACECRAFT COMMUNICATION NETWORKS

Specifically designed high speed links capable of data rates up to 10 Gbit/s.

- Two  $50\Pi$  coaxial cables per transmission line are used and lengths are matched in order to reduce skew to a minimum.
- The connector has a special  $100\Pi$  insert for the transmission line. In the case of multi-way connectors each  $100\Pi$  insert is isolated from the others. This solution delivers:
- Low skew (<10 ps)
- Low crosstalk (<60 dB)

### ► 10Gb/s CONNECTOR EXAMPLES

#### TWO WAY PCB QFX CONNECTOR

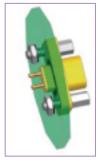
Two  $100\Pi$  transmission lines. Hand formable coaxial cable pigtail soldered to a PCB by the user.



#### SINGLE WAY PCB PARALLEL GAP CONNECTOR

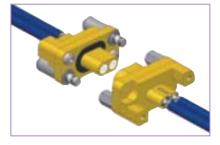
Single  $100\Pi$  transmission line.

Flat conductor welded\* to the contact and soldered to a PCB. \*parallel gap electric welding performed by the user.



# SINGLE WAY INLINE MATED PAIR

Single  $100\Pi$  transmission line. Two AX2.4 coaxial cables (see below).





▲ SINGLE WAY AX2.4 10 GB/S CONNECTOR

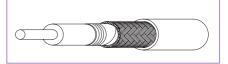
# ■ FOUR WAY INLINE MATED PAIR

Four  $100\Pi$  transmission lines.



#### AX2.4 COAXIAL CABLE

Special  $50\Pi$  AWG 24 coaxial cable with CELLOFLON® expanded PTFE dielectric.



AX2.4 COAXIAL CABLE

