PIC RF MATES®

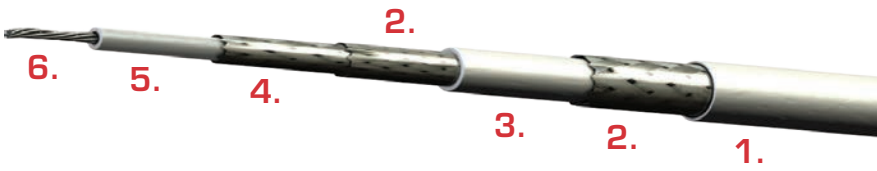
PRODUCT BULLETIN

PIC L8620TX

50 OHM TRIAXIAL CABLE

CABLE CONSTRUCTION

1. ETFE Jacket (White) Laser Markable
2. Tin-Plated Copper Shields
3. ETFE Inner Jacket (White)
4. Foil Shield
5. Foamed FEP
6. Silver-Plated Copper Conductor



Lightweight • Small • Flexible • Exceptional EMI Immunity

L8620TX provides unusual efficiency and flexibility in this coaxial-design cable with the added EMI protection by means of an isolated second 95%-coverage shield.

In triaxial cables, the outer shield is customarily grounded in order to provide a bypass for both induced and electric field noise currents. Thus EMI is significantly reduced. PIC connectors for PIC cables S86208 and S88207 can be used to terminate the "inner coax" of L8620TX.

Triax can also be connected in "driven shield" mode, using the center conductor and inner shield connected together at the signal end, with the outer shield as a coaxial return path. At the receiving end, the inner braid is unconnected, floating, to function as a Faraday shield between the active conductors, greatly reducing the distributed capacitance in the cable — and this results in reduced losses and loading.

Honeywell has approved L8620TX for use as the 10base2 LAN cable in their Apex/Epic system.

L8620TX is Skydrol resistant, RoHS compliant and meets the FAA flammability requirements of FAR Part 23 and 25, Appendix F; complies with MIL-C-17 as applicable.

CONNECTOR DATA

110397 BNC Type 3 Lug Triax Connector

PHYSICAL DATA

• Conductor	21 AWG Stranded SPC
• Operating Temperature	-55° to +150°C
• Outer Diameter: in (mm)	0.17 (4.39)
• Minimum Bend Radius: in (mm)	0.85 (21.59)
• Weight: lbs/100 ft (kg/100 m)	2.9 (4.3)

ELECTRICAL DATA

• Impedance: ohms		50
• Capacitance: pF/ft (m)		28.0 (91.9)
• Velocity of Propagation: %		79.0
• Time Delay: ns/ft (m)		1.28 (4.20)
• RF Shielding Effectiveness: dB/min		-90
• DC Resistance: ohms/1000 ft (m)		11.6 (38.1)
• Attenuation: Nom / Max	dB/100 ft	(dB/100 m)
• @400 MHz	9.1 / 10.0	(29.9 / 32.8)
• @1.0 GHz	15.1 / 16.6	(49.5 / 54.5)
• @1.6 GHz	19.7 / 21.7	(64.6 / 71.2)
• @5.0 GHz	38.9 / 42.8	(127.6 / 140.4)
• K Values (nom loss):		K1 = 0.416, K2 = 0.0019
• Formula for Attenuation:		$(K1 * \sqrt{F(MHz)} + (K2 * F(MHz)$

All values nominal unless otherwise noted