

LIGHTPLANE Connector System

Product Facts

- Optical interconnection of daughter cards to motherboard
- Bellcore compliant SC interface from motherboard
- 2 to 8 positions
- Centerline spacing 12.5 mm (0.492 in.)
- Singlemode and multimode versions
- Daughtercard floats and alignment pins on motherboard assure mating

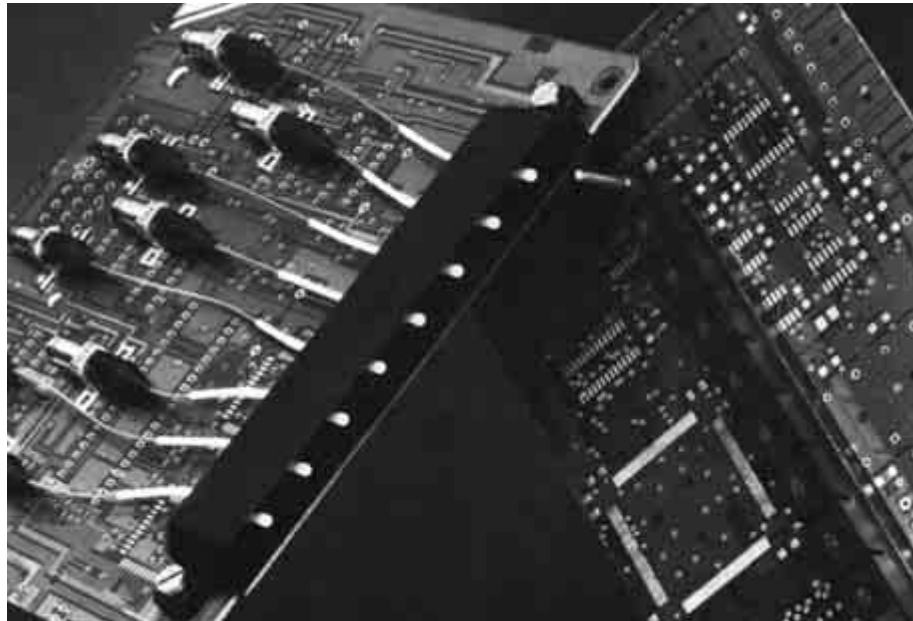
Performance Characteristics

Insertion Loss — 0.5 dB typ.

Return Loss — 40 dB min.

Temperature Range —
-40°C to +85°C

Durability — <0.5 dB after 200 cycles



The Tyco Electronics' LIGHTPLANE Connector is a multi-position fiber optic backplane connector that permits blind mating of singlemode or multimode optical fibers from a daughtercard to a system backplane or motherboard. Now you can simultaneously make both the optical and electronic interconnections when installing the daughtercard. The LIGHTPLANE connector contains up to 8 fiber positions utilizing the standard SC interface.

Use of off the shelf SC components minimizes per line costs. It also eliminates the need for separate optical jumpers from the daughtercards to the front or back of the cabinet, minimizing labor costs and possible fiber damage.

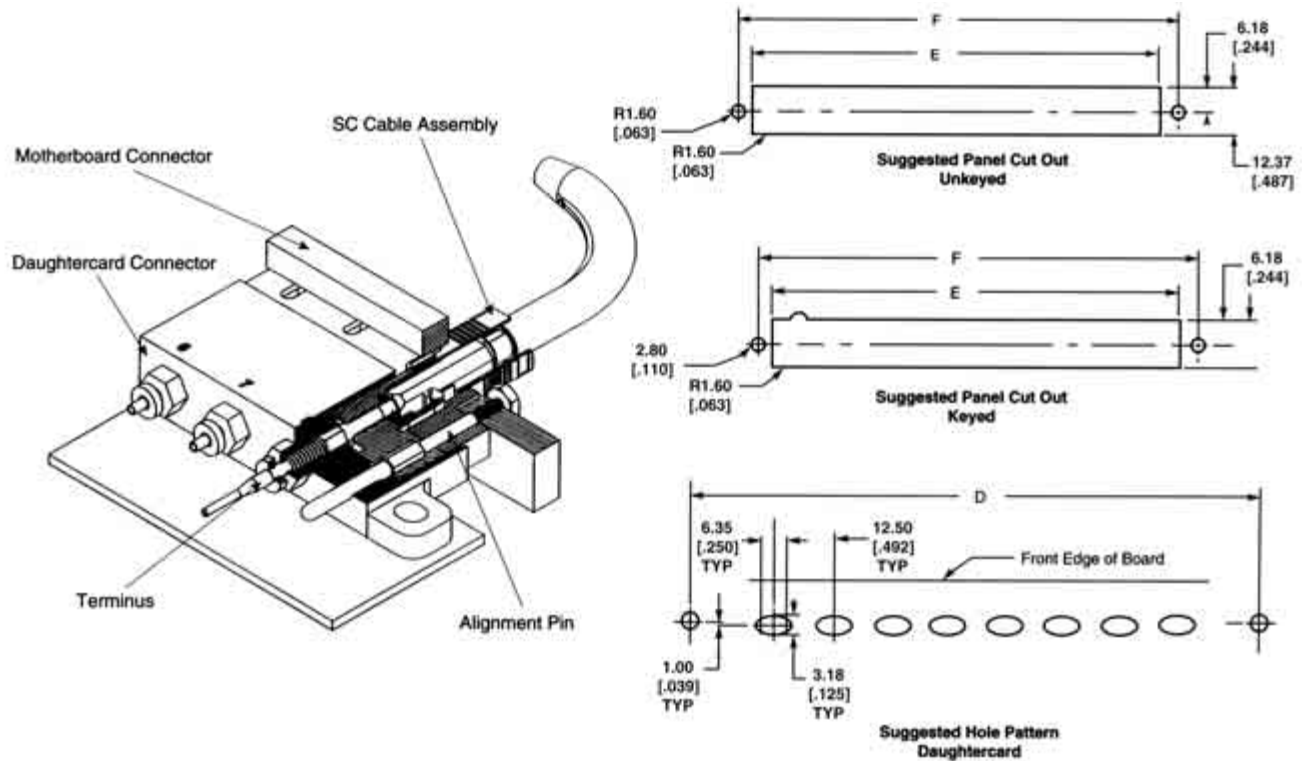
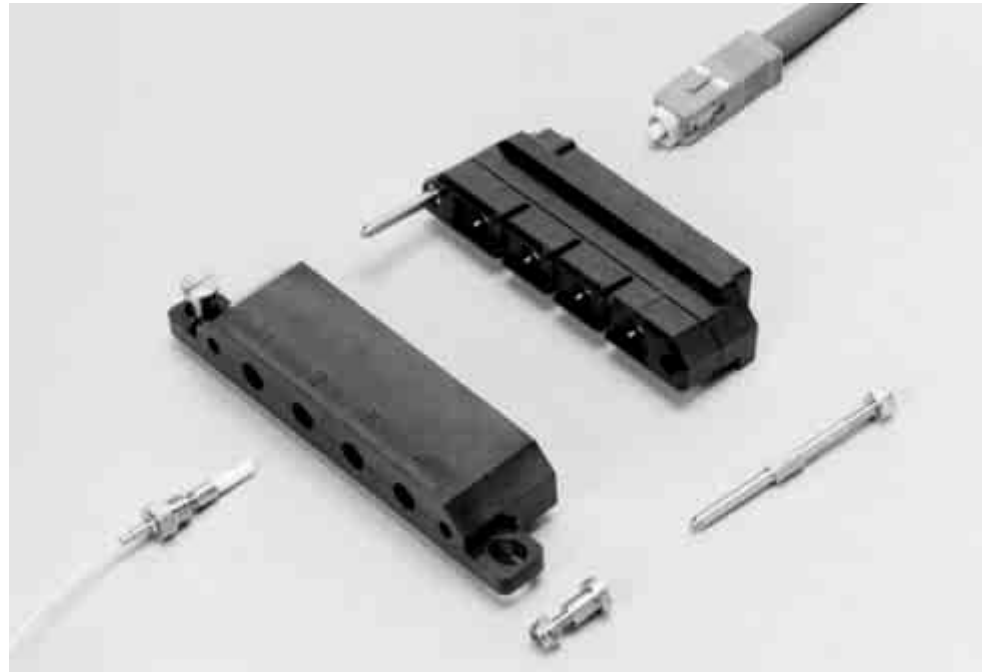
Designed for telecommunications and networking equipment, the LIGHTPLANE connector provides performance comparable to conventional SC interconnections: 0.5 dB typical insertion loss and 40 dB return loss. Shoulder screws on the daughtercard

module provide the necessary float for precise alignment. Daughtercard termini are spring loaded to ensure optical contact between the backplane and daughtercard. The daughtercard connector acts like multiple SC connectors, providing fiber density and minimizing packaging all in one protective shell. The shell protects the optical contacts on all sides from accidental damage if the board is dropped or knocked against a hard surface.

Description	Size/No. of Positions	Part Number
Daughtercard Connector	8	503185-1
Motherboard Connector Ceramic Alignment Sleeves with Polarization Key	8	5503682-1
Description	Type/Fiber Hole Dia. (µm)	Part Number
Daughtercard Terminus for 900 µm buffered fiber	Singlemode/125	5503186-1
	Singlemode/126	5503186-2
	Singlemode/127	5503186-3
	Multimode/125	5503412-1
Pre-Assembled Cable Assembly Daughtercard Terminus on both ends-2 meters — Singlemode		5503683-1

Note: All part numbers are RoHS compliant.

LIGHTPLANE Connector System (Continued)



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No. of Positions	Dimension		
	D	E	F
1	38.00 [1.496]	12.88 [.507]	20.00 [.787]
2	50.50 [1.988]	25.38 [.999]	32.50 [1.280]
4	75.50 [2.972]	50.38 [1.984]	57.50 [2.264]
8	125.50 [4.941]	100.38 [3.952]	107.50 [4.232]