DESCRIPTION/APPLICATION

Thomas & Betts Optic PCB Data Link combines the benefits of fiber optic signaling with the convenience of plug-in PCB electrical termination. It is designed to permit fast, reliable self-termination of single channel plastic optical fiber... without the need for special tools, adhesives, or polishing.

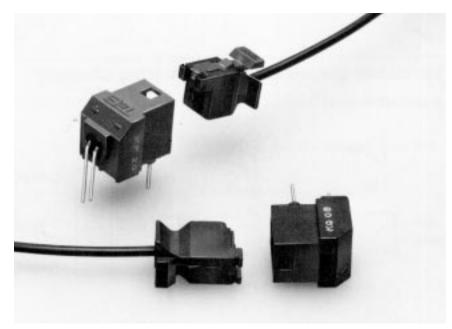
The Data Link consists of a PCBmounted receptacle with an integral emitter or detector optodevice; and a mating, self-terminating cable connector plug featuring a quickrelease tab. The receptacle Is wave solderable and color-coded for easy transmitter and receiver identification. It mates with the polarized cable connector plug with positive detents to achieve a high performance, cost effective link.

Thomas & Betts PCB data link is ideal where EMI/RFI immunity, ground loop isolation, extended distance needs, and spark-free data transmission are required.

Design Considerations

- Compatible with 1mm diameter, simplex plastic optical fiber with an OD of 2.25mm.
- Terminates fiber optic cable in seconds without tools, adhesives, or polishing.
- Suitable for terminating data transmission links at signal rates of 3Mb/s (NRZ).
- Opto-electrical interface includes a TTL compatible receiver and LED driver.
- Polarized connector plug provides positive, snap retention with quick-release tab.
- Optional color-coded (red) cable connector plug permits easy identification of transmission or receiver end of cable assembly.

FIBER OPTIC PCB DATA LINK



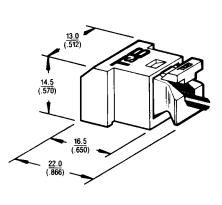
Self-terminating optical-electronic interface

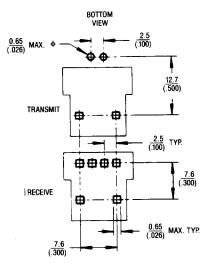
Ordering Information — PCB Mounted Receptacle

PART NUMBER	DESCRIPTION
92915-T-HS-10	Transmitter (red), 10Mbps
92915-R-HS-10	Receiver (black), 10Mbps
92915-T-DD	Transmitter (red), 3Mbps
92915-R-HS-4	Receiver (black), 3Mbps
92910	Plug (black) 2.25mm POF
92910-R	Plug (red) 2.25mm POF
92910-C5	Plug (black) 5mm POF
92910-R-C5	Plug (red) 5mm POF

FIBER OPTIC PCB DATA LINK SPECIFICATIONS

Dimensional Specifications

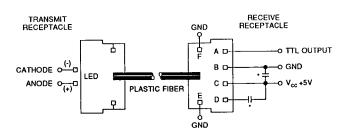




DIMENSIONS ARE SHOWN IN mm/(inches)

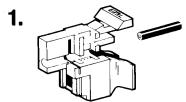
Pin Assignment

BOTTOM VIEW

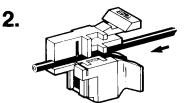


Proper operation of this product requires observance of certain design considerations. Refer to T&B publication No. 0PD-AN100. *Performance specification and application notes. *

NOTE: * CONNECT a0.1µF BY-PASS CAPACITOR (VOLTAGE RATING 25V OR MORE).

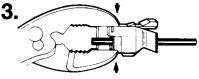


The connector plug is packaged ready to use. No fiber preparation is necessary.

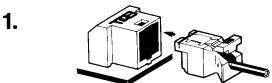


Insert the fiber in the connector as shown. The fiber should protrude through the housing by a minimum of 1 cm.

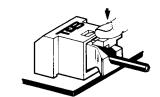
2.



Using pliers as shown, press down on the fiber clamp until it is fully bottomed in the housing. The termination is then complete. Discard unused fiber.



Insert the polarized positive-snap retention plug into the color-coded receptacle.



To remove, depress the quick-release tab and slide the plug out of the receptacle.

