Razor Series

Duplex Optical Transceiver Unit

Data Controller

PCB Mounted Optical Transceiver, GbE, 1x/2x/4xFC and sFPDP Applications, Multimode, 850nM

Applications

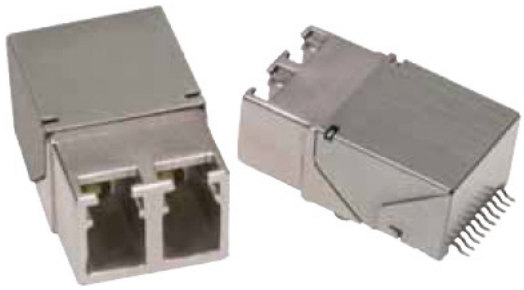
Razor series printed circuit board mounted optical transceivers enable high speed network communications over long distances in harsh environments.

- Gigabit Ethernet switches and peripherals
- Fibre Channel switches and peripherals
- sFPDP data links
- Video displays

The multimode optical fibre interface supports applications where copper cable link distance, bandwidth, weight or bulk make the use of twisted pair, twinax or quadrax copper conductors unacceptable.

Features

- Compliant with Gigabit Ethernet - IEEE-802.3:2005 and 1x/2x/4xFC - ANSI Fibre Channel FC-PI-2, FC-PI and FC-PH-2
- Optical fibre link distances up to 550 metres (50/125µv 500MHz*Km MMF)
- Maximum optical channel bit error rate less than 1x10-12
- Operating temperature range from - 40°C to + 85°C
- Nickel plated brass shell meets stringent corrosion performance requirements
- Die cast housings are strong, durable and light weight
- Duplex LC compliant optical fibre connector interface
- Threaded PCB retention features provide secure mounting in high shock and vibration environments



One TX & One RX Channel Operating from 125Mbps to 5.0Gbps

Description

Razor series optical fibre transceivers consist of optoelectronic transmitter and receiver functions integrated into a printed circuit board mounted Duplex LC compliant receptacle connector. The optical transmitters are 850nm VCSEL lasers. The transmitter input lines are driven with differential CML signals applied to the transmitter (TX+ and TX-) lines. Dual loop, temperature compensated, VCSEL drivers convert the transmitter input signals to suitable VCSEL bias and modulation currents.

Outputs from the receivers consist of differential CML data signals on the receiver (RX+ and RX-) lines. An LVTTL signal is generated on the SD line upon receipt of a valid incoming optical signal. The receiver data lines are squelched upon SD deassertion, preventing errant data generation when an invalid incoming optical signal is presented to the transceiver.

The electrical interface to the Razor optical transceivers is a solder pin header with a 10 position SMT / PCB footprint compatible with the industry standard mounting requirements.

Part Number	Application
R25N-2S1G	Transceiver @ 0.125 - 5.0 Gbps

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All specifications are subject to change without notice
The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier

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