

## **Features**

- 125 Mbps data throughput
- 10 CWDM ITU grid wavelengths
- Pluggable SFP MSA footprint
- Duplex LC connector
- Very low jitter
- Metal enclosure for lower EMI
- 3.3 V power supply with low power dissipation
- Extended operating temperature range

# 125 Mbps CWDM Optical Transceiver Module



TFCxxxx-TL29 series CWDM Optical Transceiver Modules are ideally suited for Fast Ethernet applications. Conforming to the Small Form Factor Pluggable (SFP) Multisource Agreement, these state-of-the-art plug-in components are designed for applications that require rates of up to 125 Mbps, with the laser transmission portion of the device operating at one of 10 available ITU-compliant (G.694.2) CWDM wavelengths. The modules are supplied with a duplex LC connector.

TFCxxxx-TL29 series modules feature a very low jitter contribution, resulting in extremely clean, high-quality eye patterns. And the modules' metal enclosure not only makes them sturdier, but also improves their FCC test margins. This emission and ESD control is particularly important in applications with sensitive multiport hubs and switches. The module operates at extended voltage and temperature ranges, and dissipates less than 1 W. The Class 1 laser transmitter complies with applicable safety standards (IEC 60825-1 and 21 CFR 1040.10 and 1040.11).

# TFCxxxx-TL29

# **Product Specifications**

## Physical:

· Dimensions:

2.2" L x 0.4" H x 0.5" W (5.6 cm x 1.0 cm x 1.3 cm)

• Weight: 0.1 lbs (0.05 kg)

#### **Environmental:**

• Application temperature range: -10° to +85°C (14° to 185°F)

• Storage temperature range: -40° to +85°C (-40° to 185°F)

• Humidity: 5% to 95% non-condensing

### **Optical Interface:**

• Optical connectors: Duplex LC

### **Power Requirements:**

Input voltage: 3.3 V<sub>DC</sub>

• Power consumption: 1 W max

#### General:

Link budget: 29 dBData rate: 125 MbpsHot plug-in/out

### **Optical Interface:**

#### Transmitter:

• Transmitter type: Uncooled CWDM DFB

• CWDM optical wavelengths: 10 (1430, 1450, . . ., 1610 nm)

• Optical output power: -2 dBm min

• Optical extinction ratio (ER): 10.0 dB min

### Receiver:

· Optical wavelength: 1420 nm min, 1620 nm max

• Receiver sensitivity: -34 dBm min

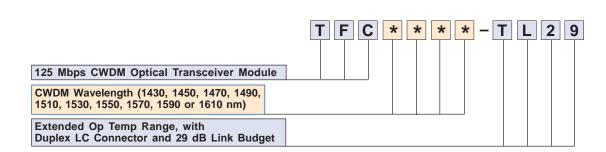
• Maximum input power: -3 dBm

• Receive LOS assert level: -36 dBm

#### Regulatory:

Class 1 devices per FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1 laser safety regulations.

## **Ordering Information**





Corporate Headquarters 5400 Betsy Ross Drive Santa Clara, CA 95054 Tel 408.235.7000 Fax 408.845.9045