

Description

The TRV5466 is a lightwave transceiver for OC-3.

Features

- Complied with SDH standard
- Fabry-Perot laser/InGaAs PIN-PD
- Operation at 155.52Mb/s for 1.3 μm wavelength
- ECL 10k interface
- Clock recovery using SAW filter
- TX: Low-power alarm and shutdown
RX: Loss-of-signal (LOS) indicator



Absolute Maximum Ratings (T_C = 25°C)

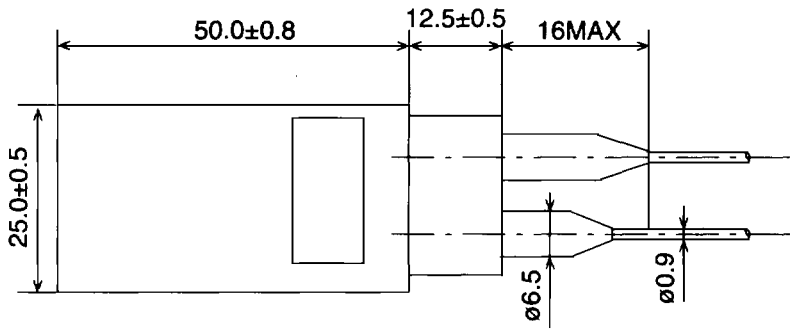
Item	Symbol	Rated Value	Units
Operating case temperature	T _{opr}	10 to 60	°C
Storage case temperature	T _{stg}	-40 to 80	°C
Supply voltages	V _{CC}	6.0	V
	V _{EE}	-5.75	
Lead soldering temperature	T _s	250	°C
Lead soldering time	—	10	sec

Optical and Electrical Characteristics (T_C = 25°C)

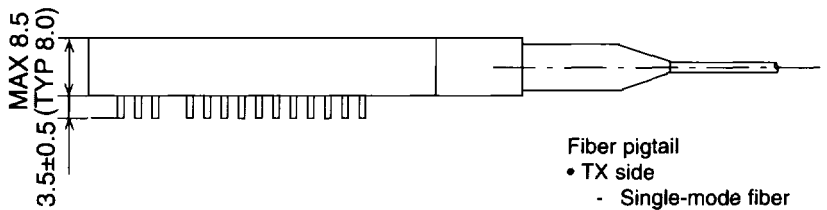
Item	Symbol	Min	Typ	Max	Units	Test Conditions
Average power output	P _O	-15	—	-8	dBm	T _C = 10 to 60°C
Center wavelength	λ _c	1270	1310	1360	nm	T _C = 10 to 60°C
Spectral width	Δλ	—	—	10	nm	FWHM
Extinction ratio	—	11	—	—	dB	P _{OH} / P _{OL}
Optical eye pattern mask	—	—	—	—	—	CCITT
Minimum received power	P _{inmin}	—	-25	-24	dBm	2 ²³ - 1 NRZ, 10 ⁻¹¹ BER
Maximum received power	P _{inmax}	-8	-7	—	dBm	2 ²³ - 1 NRZ, 10 ⁻¹¹ BER
DC power supply voltage	V _{CC}	4.75	5.0	5.25	V	
	V _{EE}	-4.94	-5.2	-5.46		
DC power supply current	I _{CC}	—	—	30	mA	V _{CC} = 5.0 V
	I _{EE}	—	—	350		V _{EE} = -5.2 V
Output rise and fall times	t _r , t _f	—	—	1.9	ns	20 to 80%

Outline Drawings and Pin Descriptions

Top View



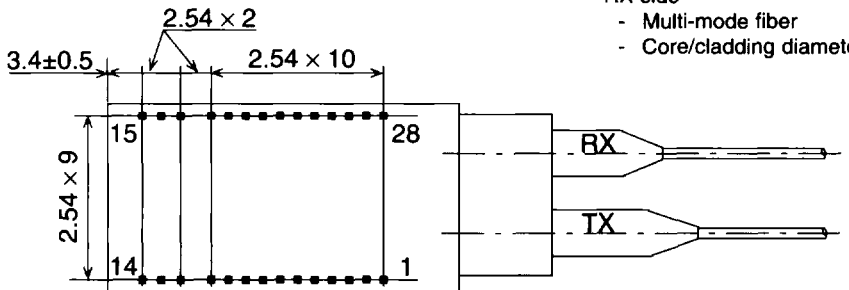
Side View



Fiber pigtail

- TX side
 - Single-mode fiber
 - Core/cladding diameter = 10/125 μ m

Bottom View



• RX side

- Multi-mode fiber
- Core/cladding diameter = 50/125 μ m

Dimension: mm

Pin	Description	Pin	Description
1:	TX Ground	15:	Data Out
2:	TX Ground	16:	Data Out
3:	TX V _{EE1}	17:	RX Ground
4:	TX Alarm Out	18:	RX Alarm Out
5:	Clock In	19:	RX V _{EE2}
6:	Data In	20:	RX V _{EE2}
7:	Shutdown In	21:	RX Ground
8:	RX V _{EE2}	22:	RX Ground
9:	RX Ground	23:	RX Ground
10:	RX Ground	24:	RX Ground
11:	RX V _{EE2}	25:	V _{CC}
12:	RX V _{EE2}	26:	RX Ground
13:	Clock Out	27:	V _{EE3}
14:	Clock Out	28:	V _{EE3}

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