Low Speed Singlemode Bi-Directional Single Fiber Optical Transceiver

Features

- 1310nm/1550nm LD
- InGaAs PD
- Industrial standard 1 x 9 pin footprint

Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Transmitter					
Optical Output Power (avg.) (1)					
-1	Po	-14	-	-8	dBm
-2	Po	-8	-	-3	dBm
-3	Po	-3	-	0	dBm
Optical Wavelength					
TR13R15 (1310nm FP LD)	λ_C	1260	1310	1360	nm
TR15R13 (1550nm FP LD)	λ_C	1490	1550	1610	nm
Spectral Width	$\Delta\lambda$	-	1.0	2.5	nm
Laser Diode Forward Current		-	15	25	mA
Laser Diode Forward Voltage		1	1.2	1.5	V
Monitor Current (PD)	I_m	0.1	0.7	-	mA
Dark Current (PD)	I_d	-	-	0.1	μA
Output Rise Time (10-90%)	t_r	-	0.3	0.7	ns
Output Fall Time (10-90%)	t_f	-	0.3	0.7	ns
Tracking Error (-40 to 85 ^oC)	E_t	-	-	±1.0	dB

Parameter	Symbol	Min.	Typ.	Max.	Unit
Receiver					
Optical Input Responsivity (1)					
-1	P_{IN}	0.7	0.8	-	A/W
Optical Wavelength	λ	1250	-	1650	nm
Output Rise Time (10-90%)	t_r	-	-	1	ns
Output Fall Time (10-90%)	t_f	-	-	1	ns
Dark Current	Id	-	-	1	nA
Capacitance	Ct	-	-	0.8	pF
Optical Return Loss	RL	50	-	-	dB
Optical Cross Talk	CL	35	-	-	dB

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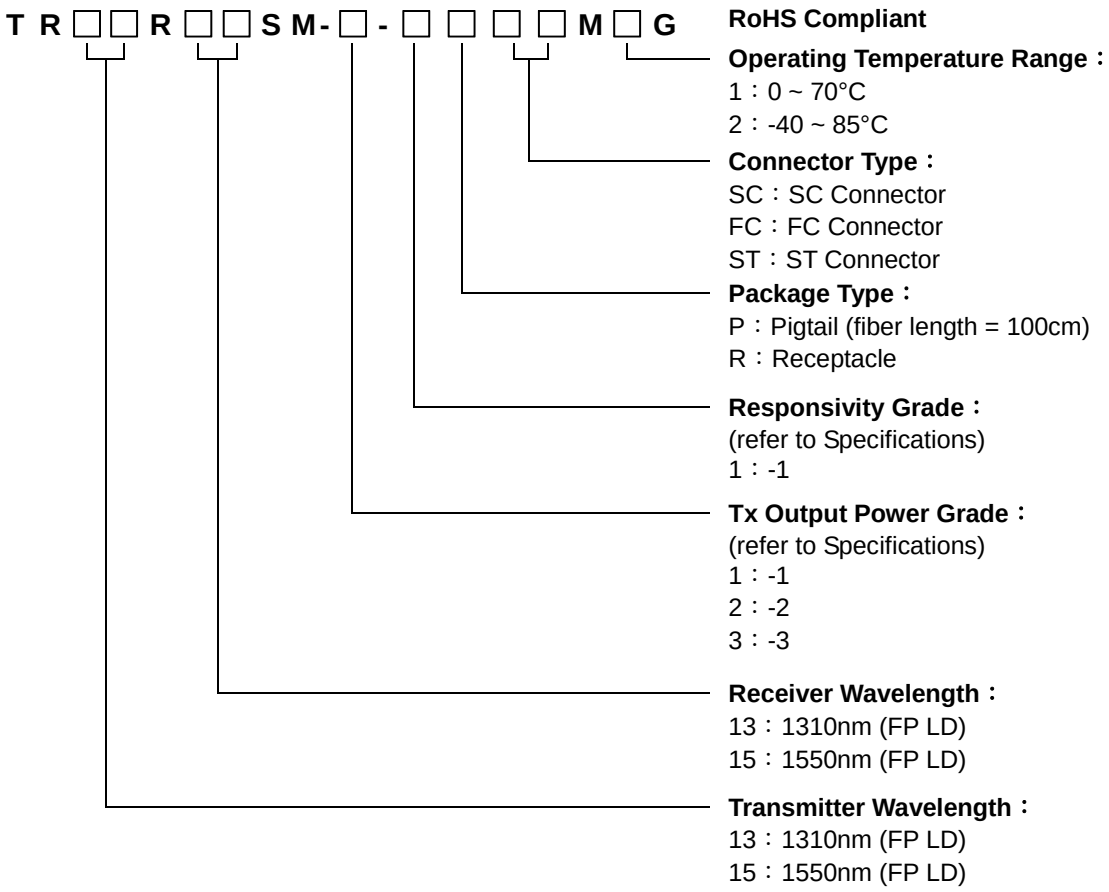
Note:
(1) With 0.275 NA, 9/125μm fiber.
(2) The transmitter output should not be viewed directly.

Absolute Maximum Ratings

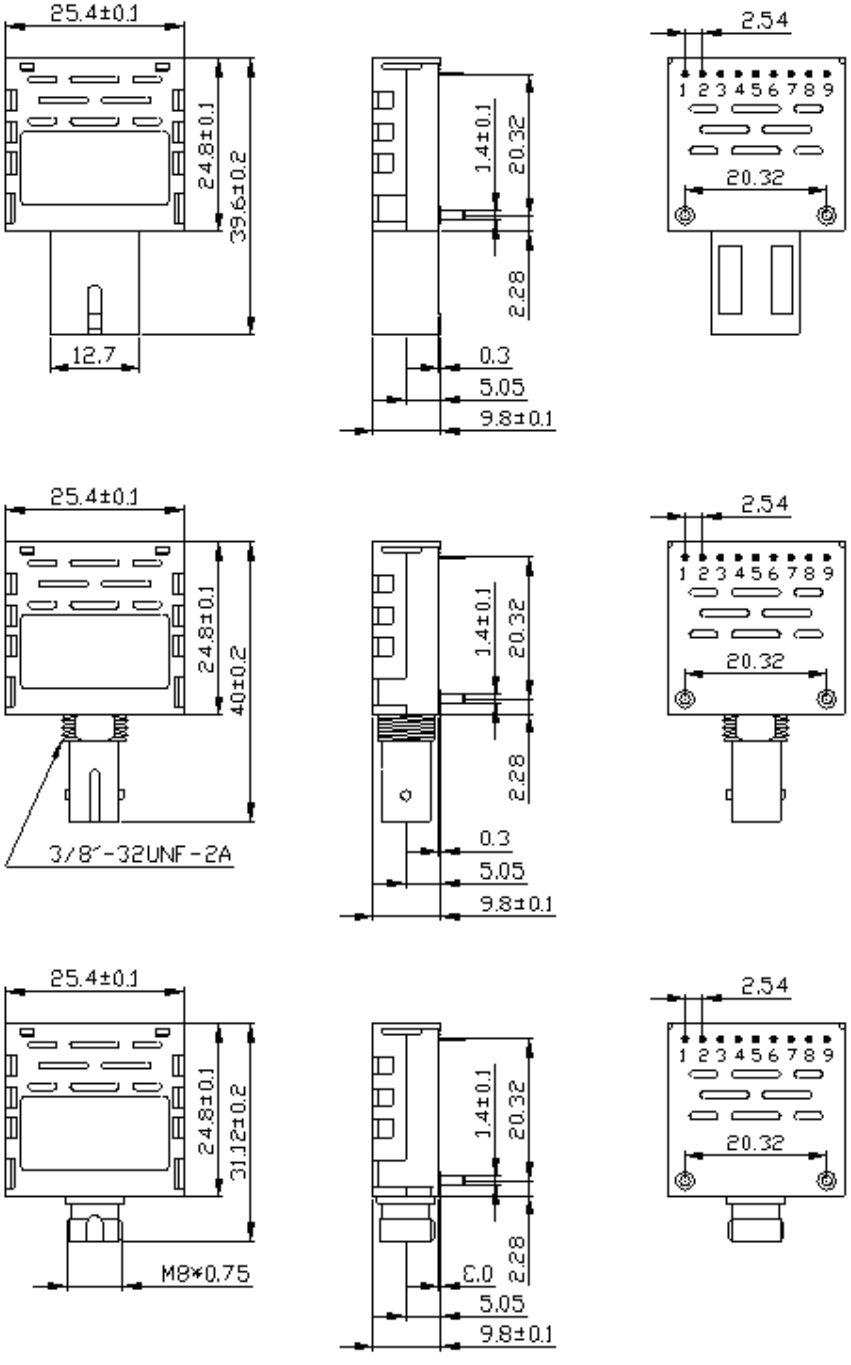
Parameter		Min.	Max.	Unit
Operating Temperature	-1	0	70	°C
	-2	-40	85	°C
Storage Temperature		-40	100	°C
Lead Soldering Limits		-	240/10	°C /sec

Ordering Information



Outline Drawing

Receptacle Type：



UNIT：mm

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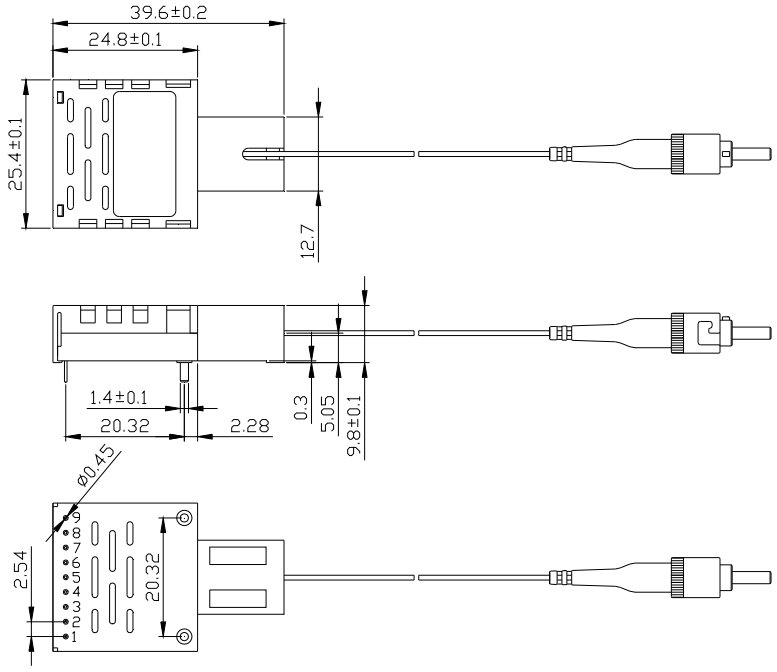
Pigtail Type：



UNIT：mm

Pinout Description

Pin No.	Symbol	Description
1	PD-Gnd	PD Ground
2	PD+	PD Anode
3	PD-	PD Cathode
4	NC	No Connection
5	NC	No Connection
6	NC	No Connection
7	LD-	LD Cathode
8	LD+	LD Anode
9	LD-Gnd	LD Ground