SNSptical

Single Mode 1310/1310 Bi-directional Single Fiber Module with PIN-TIA

Sinqle Fiber Bi-Directional Optical Module

Laser Diode (T= 25°C)

Parameter	Symbol	Test Conditions	Min	Typical	Max	Units
Data Rate			100M		1.25G	b/s
Center Wavelength	λ	P_0 -40 to 85ºC	1260	1310	1360	nm
Spectral Width	$\Delta\lambda$	P_0, (RMS, -20dB)	-	1	2	nm
Threshold Current	I_{th}	P_0, 25ºC		5	10	mA
Operating Voltage	V_{op}	P_0	-	1.1	1.5	V
Rise/fall Time	t_r / t_f	10-90%	-	0.3	0.7	ns
Optical Output Power	P_0	I_{th}+20mA1				
-1			0.1	-	0.4	mW
-2			0.4	-	0.7	mW
-3			0.7	-	1.2	mW
Monitor Current (PD)	I_m	P_0 ,V_{RD} =1V	0.1	0.5	-	mA
Dark Current (PD)	I_d	V_{RD}=10V	-	-	0.1	uA
Tracking Error	E_t	-40 to 85ºC	-	±1.0	-	dB

PIN-TIA (T=25ºC, V= 4.75 to 5.25V DC or 3.1 to 3.5V DC)

Parameter		Symbol	Min.	Typical	Max.	Unit
Data Rate		B	100M	-	1.25G	b/s
Optical Input Sensitivity		S				
155Mbps	1		-	-	-20	dBm
	2		-	-	-22	
622Mbps	1		-	-	-16	dBm
	2		-	-	-18	
1.25Gbps	1		-	-	-16	dBm
	2		-	-	-18	
Saturation		-	-3	0	3	dBm
Cross Talk				20		dB

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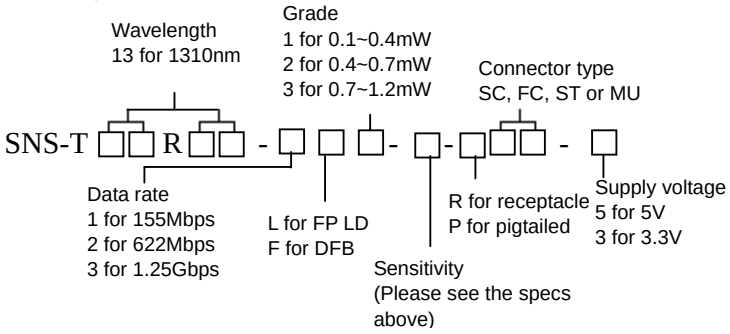
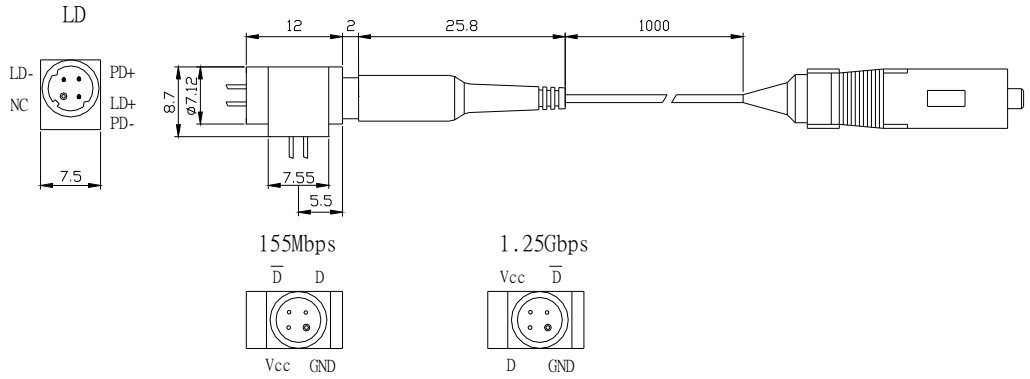
Absolute Maximum Ratings (T=25ºC)

Parameter	Symbol	Min.	Max.	Unit
Forward Current (LD)	I_{op}	-	85	mA
Reverse Voltage (LD)	V_{RL}	-	2	V
Forward Current (PD)	I_{FD}	-	2	mA
Reverse Voltage (PD)	V_{RD}	-	20	V
Operating Temperature	T_O	-40	85	ºC
Storage Temperature	T_{stg}	-40	125	ºC
Lead Soldering Temperature (10 sec)	T_L	-	260	ºC
Supply Voltage 5V	-	-0.2	7	V
3.3V	-	-0.2	4	V

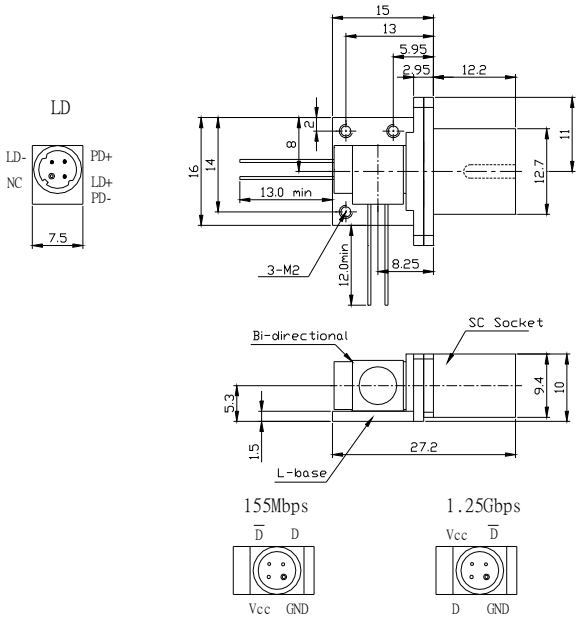
Ordering Information



Pigtailed:



Receptacle:


LD
LD-
NC
PD+
LD+
PD-
7.5
15
13
5.95
2.95
12.2
2
8
16
14
13.0 min
11
12.7
3-M2
12.0min
8.25
Bi-directional
SC Socket
5.3
1.5
9.4
10
27.2
L-base
155Mbps
D
D
Vcc
GND
1.25Gbps
Vcc
D
D
GND