

225Mbps Multimode Optical Transmitter

Features

- 2X8 pins plastic case with ST Receptacle
- Wavelength 1310nm multimode fiber application
- Wide operating temperature range $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- Single 5V power supply
- Output power enable function



Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Data Rate (NRZ)	B	10	225	270	Mb/s
Optical Output Power (avg.) ^{(1) (2) (3)}	P_o	-19	-	-	dBm
Extinction Ratio		9	-	-	dB
Optical Wavelength	λ	1270	1310	1360	nm
Spectral Width	$\Delta\lambda$	-	-	180	nm
Data Input	V_{IL} V_{IH}	$V_{cc}-1.87$ $V_{cc}-1.15$	- -	$V_{cc}-1.45$ $V_{cc}-0.73$	V V
Differential Input Voltage	V_{DIF}	0.3	-	1.1	V
Input Common Mode Range	V_{ICM}	-	-	1.0	V
Output Rise Time (10-90%)	t_r	-	-	1.0	ns
Output Fall Time (10-90%)	t_f	-	-	1.5	ns
TX Enable Input Voltage	V_{EIL} V_{EIH}	0 2	- -	0.6 V_{cc}	V V
Transmit OFF Power		-	-	-50	dBm
Random Jitter (p-p)	RJ	-	-	0.4	ns
Supply Voltage	V_{cc}	4.75	5	5.25	V
Supply Current	I_{cc}	-	-	180	mA
Power Dissipation		-	-	1000	mW

Notes :

- (1) With 0.29 NA, 62.5/125 μm multimode fiber.
- (2) Class 1 eye safe per FDA and IEC.
- (3) $2^{23} - 1$ PRBS.
- (4) The transmitter output should not be viewed directly.

Absolute Maximum Ratings

Parameter	Min.	Max.	Unit
Operating Temperature	-40	85	$^{\circ}\text{C}$
Storage Temperature	-40	100	$^{\circ}\text{C}$
Lead Soldering Limits	-	260/10	$^{\circ}\text{C} / \text{sec}$
Supply Voltage	-0.2	6	V

Ordering Information

T013MM0-1SST5PR0G1

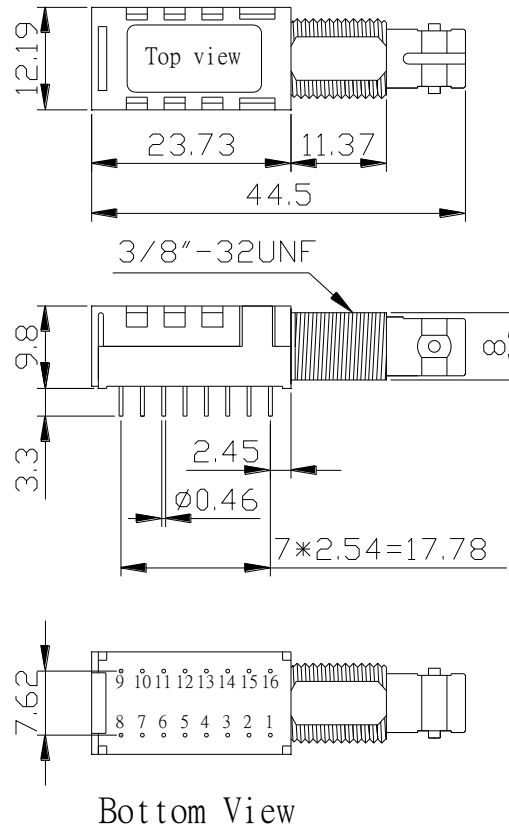
or

T013MM0-1SST5PR0G1B ————— Type B pinout

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Outline Drawing & Connections

2x8Pins Plastic Case :



Unit : mm

Regular pinout

Pin No.	Description
1	No Connection
2	No Connection
3	GND
4	GND
5	GND
6	GND
7	No Connection
8	No Connection

Pin No.	Description
16	No Connection
15	DATA -
14	DATA +
13	GND
12	Vcc
11	Vcc
10	GND
9	No Connection

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Type B pinout

Pin No.	Description
1	No Connection
2	GND
3	Vcc
4	Vcc
5	GND
6	DATA +
7	DATA -
8	No Connection

Pin No.	Description
16	No Connection
15	No Connection
14	GND
13	GND
12	GND
11	GND
10	No Connection
9	No Connection