

# 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.) <sup>(1) (2) (3)</sup>	$P_o$	-19	-	-	dBm
Extinction Ratio		9	-	-	dB
Optical Wavelength	$\lambda$	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
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 $\mu\text{m}$  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

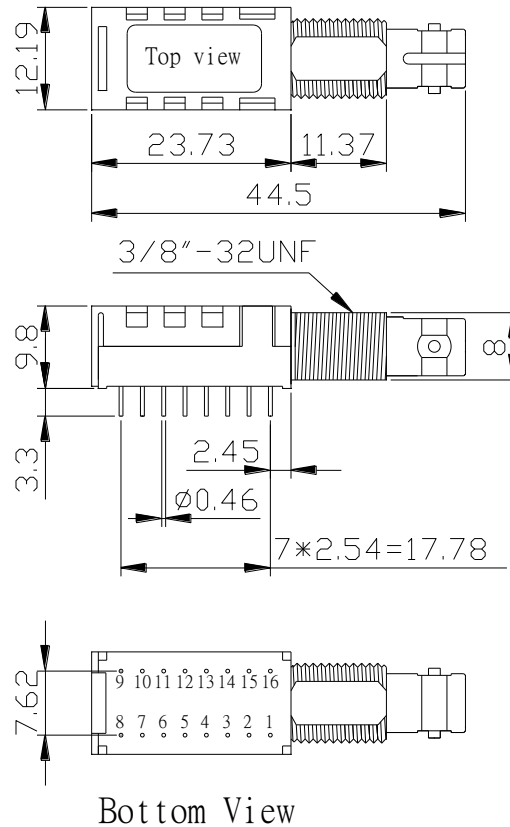
or

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