

## 225Mbps Multimode Optical Receiver

### 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
- Receiver signal detect function



### Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Data Rate (NRZ)	B	10	225	270	Mb/s
Optical Input Sensitivity (avg.) <sup>(1) (2)</sup>		-	-	-32	dBm
Saturation (avg. power)		-3	-	-	dBm
Optical Wavelength	$\lambda$	1100	1310	1600	nm
Output Rise Time (10-90%)	$t_r$	-	1.5	2.5	ns
Output Fall Time (10-90%)	$t_f$	-	1.5	2.5	ns
Data Output	$V_{OL}$ $V_{OH}$	$V_{cc}-1.83$ $V_{cc}-1.035$	- -	$V_{cc}-1.62$ $V_{cc}-0.88$	V V
SD Deasserted Power Level (avg.)	$P_A$	-	-	-32	dBm
SD Asserted Power Level (avg.)	$P_D$	-45	-	-	dBm
SD Hysteresis	-	1.5	-	-	dB
SD Timing (Increasing light input)	$T_{SD+}$	-	-	100	$\mu\text{s}$
SD Timing (Decreasing light input)	$T_{SD-}$	-	-	350	$\mu\text{s}$
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)  $2^{23} - 1$  PRBS, BER=  $2.5 \times 10^{-10}$ .

### Absolute Maximum Ratings

Parameter	Min.	Max.	Unit
Operating Temperature	-40	85	$^{\circ}\text{C}$
Storage Temperature	-40	100	$^{\circ}\text{C}$
Lead Soldering Limits	-	240/10	$^{\circ}\text{C} / \text{sec}$
Supply Voltage	-0.2	6	V

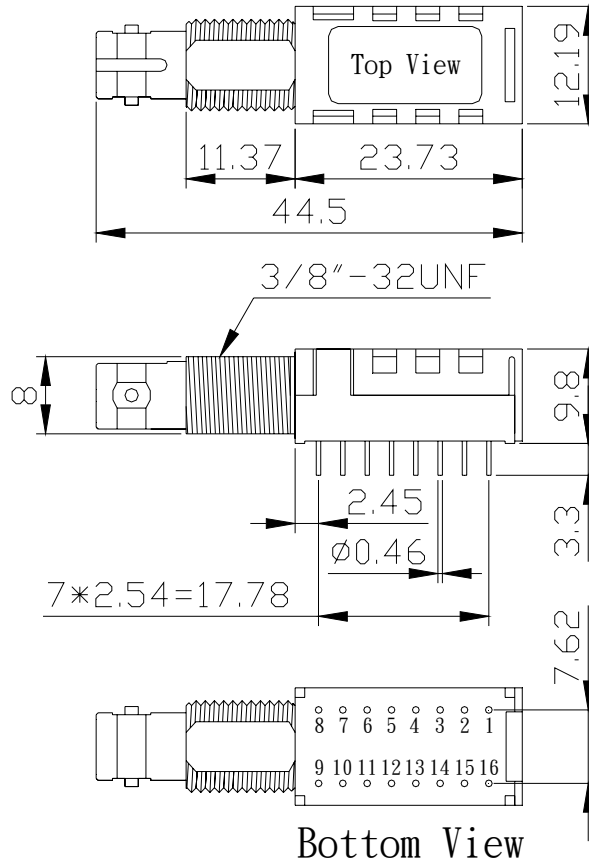
### Ordering Information

R013MM0-XSST5PR1G1

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## Outline Drawing & Connections

2x8Pins Plastic Case :



Unit:mm

Pin No.	Description
1	No Connection
2	DATA -
3	DATA +
4	V <sub>CC</sub>
5	V <sub>CC</sub>
6	V <sub>CC</sub>
7	GND
8	No Connection

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