

MR71-9-I5

Features

- ◆ Single +3.3V power supply
- ◆ Data rates up to 28.1Gbps NRZ rate
- ◆ Operation Temperature: -40°C ~ 85°C
- ◆ Operating wavelength range 1260~1360nm
- ◆ Typical OE bandwidth 17GHz
- ◆ Lower frequency cut-off 60kHz typical at sensitivity
- ◆ LC receptacle
- ◆ RoHS compliant
- ◆ Receptacle is electrically isolated from TO-46 can

Application

- ◆ 25GbE SFP28
- ◆ 25G CPRI

Description

The ROSA offers 25 Gb/s capability in a TO-46 style co-axial package, with excellent sensitivity performance coupled with low power consumption.

Absolute Maximum ratings

Parameter	Symbol	Min.	Max.	Unit
Operating Case Temperature	Tc	-40	85	°C
Storage Temperature	Tstg	-40	85	°C
Lead Soldering Temperature/Time	Tsld		260/10	°C/S
Relative Humidity (without dew)	RH	0	90	%

DC Characteristics

Electrical Characteristics $V_{cc}=+3.3V\pm 10\%$, $T_c=-40^{\circ}C$ to $85^{\circ}C$, unless specified.

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Supply Voltage	VCC	2.90	3.3	3.63	V	
Supply Current	ICC	--	24	--	mA	no loads
Operating Wavelength	λ	1260	1310	1360	nm	
Differential Output Resistance	Rout	--	100	--	ohm	
Compliance Voltage for the RSSI output	Vcomp	--	--	$V_{cc}-0.8$	V	
RSSI GAIN	RSSlgain	--	0.5	--	A/A	
RSSI linearity	RSSlin	--	1	--	%	
RSSI Offset	RSSloffset	--	6	10	nA	

AC Characteristics

Electrical Characteristics $V_{cc}=+3.3V\pm 10\%$, $T_c=-40^{\circ}C$ to $85^{\circ}C$, $R_{load}=50\Omega$ AC-coupled via 100nF capacitors for each output unless specified.

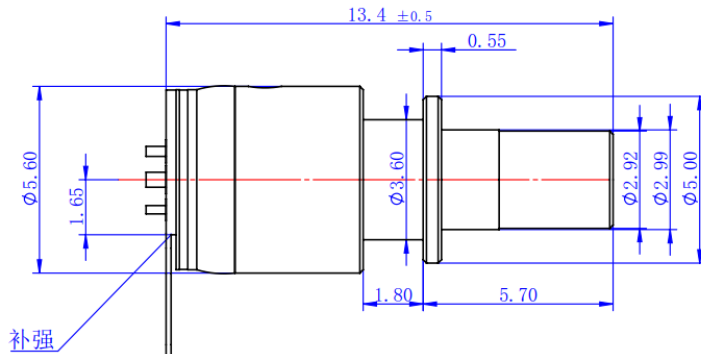
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Mean unstressed optical sensitivity	Psens	--	-14	-12	dBm	1,2
Overload	Ovrlid_ac	2.8	3.5	--	mApp	2
Differential Transimpedance Gain	TZgain	--	2.5	2.8	kohm	1,3
OE Small Signal Upper Bandwidth at -3dB point	BW(3dB)	--	17	--	GHz	1,3
Lower frequency cut-off	LFC(3dB)	--	60	--	KHz	

Notes:

1. Typical values defined as typical process, T_j at $27^{\circ}C$ and VCC at 3.3V while minimum and maximum values are under worst or best case process, power supply and case temperature for the parameter specified.
2. Assuming an extinction ratio of 4.2dB.
3. Measured with 100Ω differential termination on the outputs.

Module Drawing, Pin Assignments

Dimensions(Unit:mm)



Pin	Name
1	GND
2	VCC
3	GND
4	OUT+
5	OUT-
6	GND
7	RSSI
8	GND

