LC-ROSA 850nm 10G with RSSI Current Source Mode and Flex Cable



KEY FEATURES

- Single +3.3V power supply
- Operates to 10 Gbps NRZ rates
- Transimpedence gain 7 k Ω into 100 Ω differential load
- RSSI (Received Signal Strength Indicator) current output operates from Sensitivity to overload.
- Package with/without flex cable are available

APPLICATIONS

- 10GBASE-SR
- 8XFC



C-ROSA 850nm 10G

WITH RSSI CURRENT SOURCE MODE AND FLEX CABLE

SPECIFICATIONS

Absolute maximum ratings:

Parameter	Rating
Storage Temperature	-40°C ~ +100°C
Operating Temperature (ROSA case)	-40°C ~ +85°C
Supply Voltage	-0.3V ~ +4.0V
Voltage at either output	-0.3V ~ +4.0V
Peak Input Optical Power	+6.5 dBm

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Parameter	<u>Symbol</u>	<u>Unit</u>	Min	Typ.	Max	Conditions
Operating Wavelength	λ	nm	770		860	
I _{CC} current	I _{CC}	mA	21	28	41	
Differential impedance	Z	Ω	80	100	120	
Optical overload (OMA)	Povrld	dBm	+2.5	+4.5		(Note 1)
3dB Bandwidth	BW	GHz	7	10		
Low frequency cutoff	BWL	kHz	5	7	10	
Differential Transimpedance	Tz	kΩ	5	7	10	
Maximum Differential output	V _{outmax}	MVp-p	240	280	350	
voltage						
RSSI output offset (no light)	loffset	UA	3.5	10	16	
RSSI current gain	Imon Gain	A/A	0.4	0.5	0.6	
Average unstressed	$P_{sens (UNST)}$	dBm		-15.5	-13.0	PRBS= 2^31-1, BER=10^-12,
optical sensitivity						ER = 7dB @ 850nm,
						10.2125Chas. (Note 1 and 2)

Electro-optical Characteristics (Unless otherwise specified, $T_A = -40 \sim 85^{\circ}$ C):

10.3125Gbps, (Note 1 and 2)

NOTE:

- 1. Typical values defined as a typical process, case temperature at 25°C and V_{CC} at 3.3 V while maximum and minimum values are under worst or best case process, power supply and junction temperature for the parameter specified.
- 2. The state performance should be achievable dependent upon the RF environment in which the user packages the ROSA.

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PRODUCT DRAWING



PART NUMBER

8100012703

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