



XS-T1100-SMOD, XS R1100-SMOD series 10Gb/s 850nm Surface Mount Optical Transmitter & Receiver Modules

Description

Intexys offers a surface mount Multi Chip Module (MCM) solution for 850nm data communications from 4 to 10Gbit/s. The quasi-hermetic packaged sub-assembly integrates laser (Photodiode), driver (TIA), passive components. The MCM technology used by Intexys results in drastic improvements in circuit density, size, power consumption and cost reduction, and solves signal integrity management problems.

Features

- Data rate up to 10Gbit/s
- Unique high density packaging designed for small form factor applications
- Packaged with driver and TIA electronic and related passive components
- Full flip chip assembly internally matched
- Surface mount package
- Low cost effective solution

Applications

- Free Space Optics
- On-Board optical interconnections
- Mobile Applications

Main Transmitter Characteristics

Parameters	Min	Typ	Max	Unit
Data rate		10,3125	10,7	Gbit/s
Deviation from nominal speed	-100		100	ppm
Rise time		40		ps
Fall time		40	50	ps
Extinction ratio (ER)	4	5		dB
Jitter RMS		3,75		ps
Jitter pp		30	35	ps
10G Ethernet mask margin	5	10		%
TOSA total power consumption	140		160	mW

Main Receiver Characteristics

Parameters	Min	Typ	Max	Unit
Data rate			10,7	GBd
Conversion gain (λ = 850 nm, -12dBm)	10	20	40	mV/μW
Optical sensitivity	850 nm		-12	dBm
	1310 nm		-19	dBm
Output Impedance	42	50	58	Ω
Optical overload (NRZ PRBS 2 ²³⁻¹ / BER 10 ⁻¹⁰)		0		dBm



Intexys Photonics reserves the right to change specifications without prior notice

contact :

tel : + 33 (0)5 61 61 82 00 fax : + 33 (0)5 61 48 76 94
www.intexysphotonics.com

INTEXYS PHOTONICS
Operations • Toulouse
15, Avenue d'Hermès
31240 L'Union - France

INTEXYS PHOTONICS
R&D • Grenoble
17, Rue des Martyrs
38054 Grenoble - France

