

# PMI-2.5G-L

## Photodiode module with TIA with AGC, 2.5 Gbps

### DESCRIPTION

In this module a PIN InGaAs photodiode (working wavelength range 1260 – 1620 nm) is integrated with a low noise high gain TIA with auto gain control (AGC). It is equipped with an SM or MM fiber.

PMI-2.5G-L-RM is the module with optical matching (space between a fiber and a photodiode is filled with an index-matched medium).

PMI-2.5G-L-R50 provides low back reflection (<-50 dB).

Applications: optical communications.

### ABSOLUTE MAXIMUM RATINGS

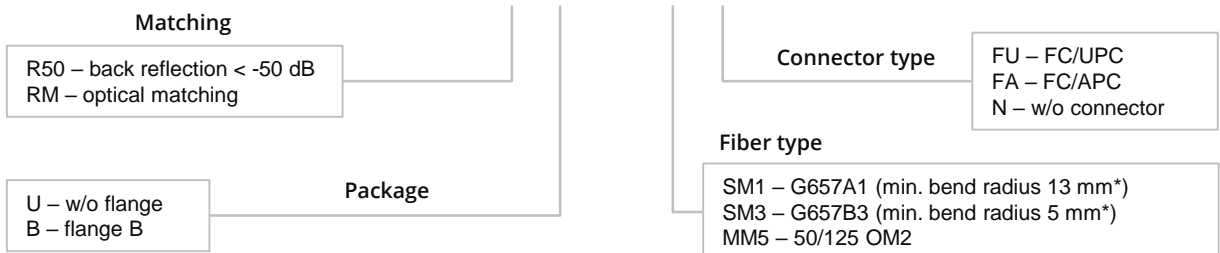
Parameter	Value	Unit
Operating temperature, $T_c$	-40 ÷ +80	°C
Storage temperature, $T_{stg}$	-40 ÷ +85	°C
Lead solder temperature, time 10 s	260	°C

### ELECTRICAL-OPTICAL CHARACTERISTICS (SINGLE MODE, $\lambda = 1310$ nm, $T = 25$ °C)

Parameter	Min	Typ	Max	Unit	Test conditions	
Supply voltage	$V_{cc}$	3.0	3.3	3.6	V	
Supply current	$I_{cc}$		48	60	mA	no load
Differential responsivity	$R_d$	14		30	mV/ $\mu$ W	$R_{load} = 100 \Omega$ , $P = -23$ dBm, $\lambda = 1310$ nm
Single-ended responsivity	$R_S$	7		15	mV/ $\mu$ W	$R_{load} = 50 \Omega$ , $P = -23$ dBm, $\lambda = 1310$ nm
Bandwidth	BW	1.4			GHz	
Low frequency cut-off	LF		80		kHz	
Rise/fall time	$t_R, t_F$		170	200	ps	$P = -23$ dBm, 20% - 80%
Saturation power	$P_{sat}$	0			dBm	
Impedance	$R_0$		50		$\Omega$	
Sensitivity				-25	dBm	$\lambda = 1310$ nm, 2488.32 Mbps, BER = $10^{-10}$ , PRBS23, ER = 10dB

### ORDERING INFORMATION

## PMI-2.5G-L-X-X-13-X-X



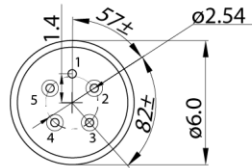
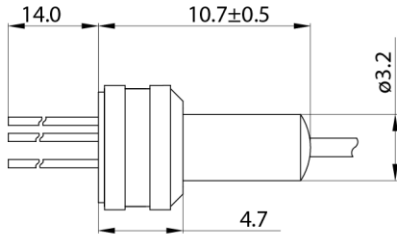
Typical fiber length = 50 cm \*Attenuation 0.1 dB/loop at 1550 nm

Our products are certified by Belarusian Chamber of Commerce. All the components used in production are ISO 9001:2008 certified and comply with RoHS directive. Characteristics, data, materials and structures specified in this datasheet are subject to change without notice.

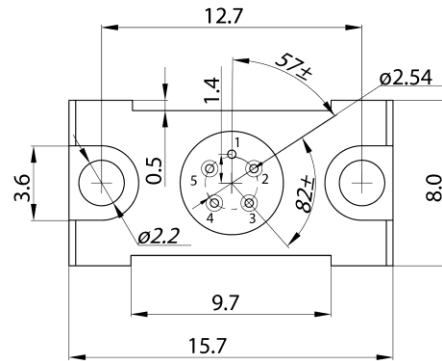
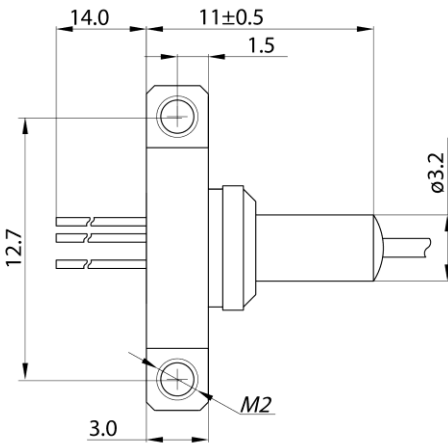
This document was updated on 31.08.2017

# PMI-2.5G-L

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- 1.Gnd
- 2.Dout
- 3.Vcc
- 4.Isink
- 5. Dout



- 1.Gnd
- 2.Dout
- 3.Vcc
- 4.Isink
- 5. Dout

B