

PDI-4P40-4G-K-R50

PIN photodiode module, 1000-1650 nm, 4 GHz, 40 mW

DESCRIPTION

This detector module works in the spectral range 1000 - 1650 nm at frequencies up to 4 GHz and optical power up to 40 mW. It is equipped with an SM fiber and provides low back reflection < -50 dB. Small size and weight allow for installing it on a PCB without additional mounting.

Applications: high-speed optical communication systems.

ABSOLUTE MAXIMUM RATINGS

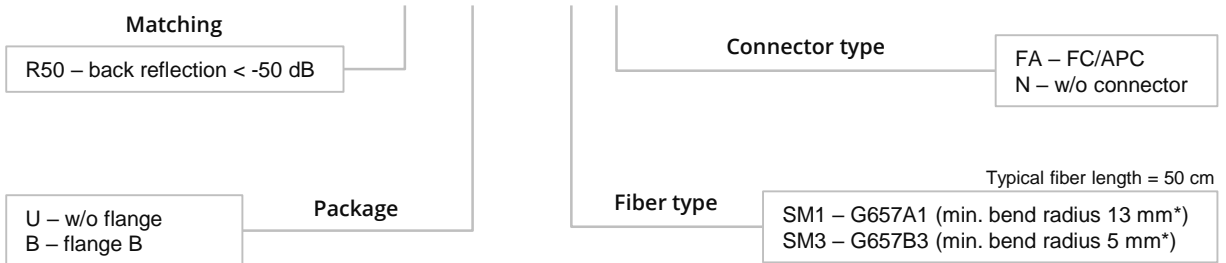
Parameter	Value	Unit
PD reverse voltage, V_r	5.5	V
PD forward current, I_f	50	mA
Operating temperature, T_c	-40 ÷ +80	°C
Storage temperature, T_{stg}	-40 ÷ +85	°C
Optical power, P	40	mW

ELECTRICAL-OPTICAL CHARACTERISTICS (SINGLE MODE, T = 25 °C)

Parameter		Min	Typ	Max	Unit	Test conditions
Responsivity	S_λ	0.85	0.9		A/W	$\lambda = 1550 \text{ nm}$, $V_R = 3 \text{ V}$
Operating voltage	V_{op}		3	5	V	
Back reflection	R_L		-50		dB	$\lambda = 1550 \text{ nm}$
Dark current	I_d	0.005	0.01	0.02	nA	$V_R = 3 \text{ V}$
Chip capacitance	C_{chip}		0.35	0.50	pF	$V_R = 3 \text{ V}$, $f = 1 \text{ MHz}$
Total capacitance	C_t		0.55	0.80	pF	$V_R = 3 \text{ V}$, $f = 1 \text{ MHz}$
Cut-off frequency	f_c		4		GHz	$P_i = -10 \text{ dBm}$, $V_R = 3 \text{ V}$, $R_L = 50 \Omega$, small signal modulation

ORDERING INFORMATION

PDI-4P40-4G-K-R50-X-7-X-X



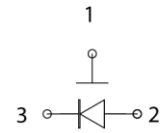
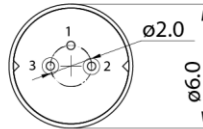
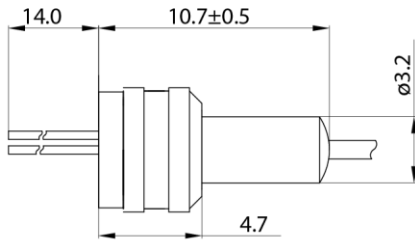
*Attenuation 0.1 dB/loop at 1550 nm

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.

The document was updated on 31.08.2017

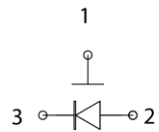
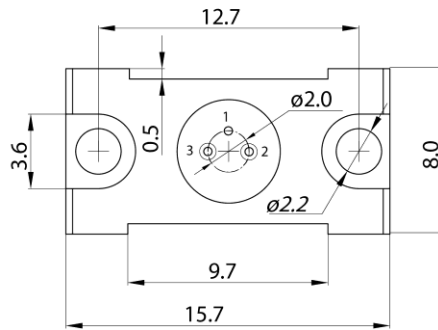
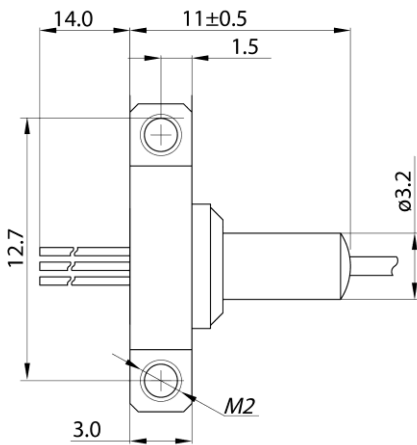
PDI-4P40-4G-K-R50

U



- 1. Case
- 2. PD Anode
- 3. PD Cathode

B



- 1. Case
- 2. PD Anode
- 3. PD Cathode

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