

PDI-40-4G-K

PIN photodiode module, 800-1650 nm, 4 GHz

DESCRIPTION

This detector module works in the spectral range 850 -1650 nm at frequencies up to 4 GHz. It is equipped with an SM fiber. Small size and weight allow for installing it on a PCB without additional mounting.

PDI-40-4G-K-RM is the module with optical matching. Space between a fiber and PD is filled with an index-matched medium.

PDI-40-4G-K-R50 provides very low back reflection (<-50 dB).

Applications: high-speed optical communication systems, reflectometry.

ABSOLUTE MAXIMUM RATINGS

Parameter	Value	Unit
PD reverse voltage, V_r	55	V
PD forward current, I_f	10	mA
Operating temperature, T_c	-40 ÷ +80	°C
Storage temperature, T_{stg}	-40 ÷ +85	°C

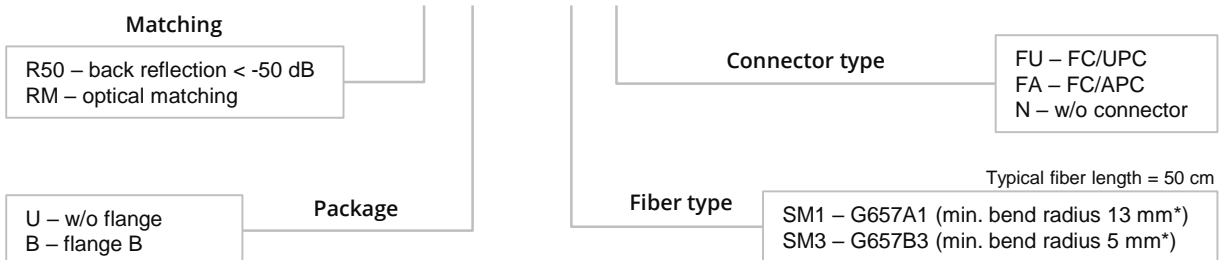
ELECTRICAL-OPTICAL CHARACTERISTICS (SINGLE MODE, T = 25 °C)

Parameter		Min	Typ	Max	Unit	Test conditions
Responsivity	PDI-40-4G-K-R50	0.96	1.04		A/W	$\lambda = 1550 \text{ nm}, V_R = 5 \text{ V}$
	PDI-40-4G-K-RM	1.00	1.10			
Back reflection*	R_L		-50		dB	$\lambda = 1550 \text{ nm}$
Dark current	I_d		0.02	0.08	nA	$V_R = 5 \text{ V}$
Capacitance	C_t		0.55	0.80	pF	$V_R = 5 \text{ V}, f = 1 \text{ MHz}$
Cut-off frequency	f_c		4		GHz	$P_i = -10 \text{ dBm}, V_R = 5 \text{ V}, \text{ small signal modulation}$
Breakdown voltage	V_{BR}		55		V	

* for PDI-40-4G-K-R50

ORDERING INFORMATION

PDI-40-4G-K-X-X-7-X-X



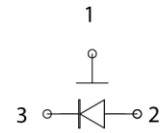
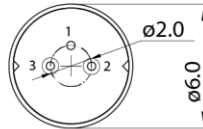
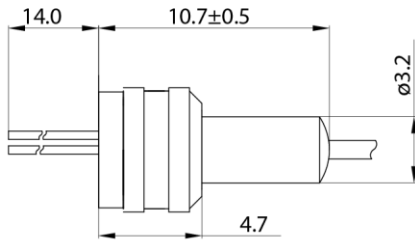
*Attenuation 0.1 dB/loop at 1550 nm

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

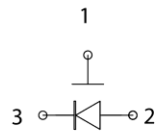
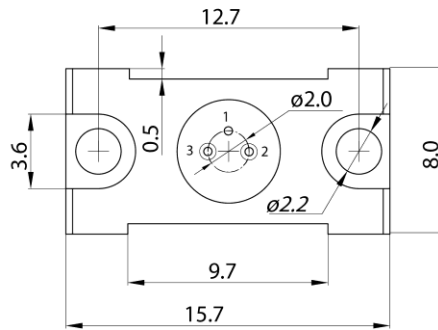
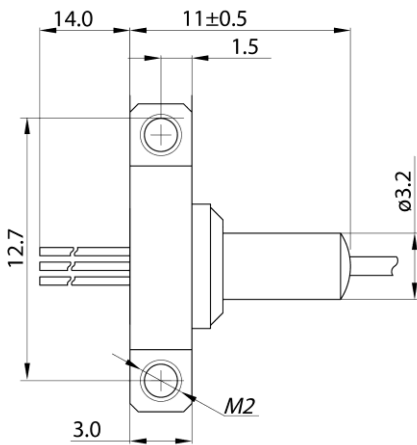
PDI-40-4G-K

U



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

B



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

PDI-40-4G-K

