

## PDI-80-2G-K

PIN photodiode module, 800-1650 nm, 2 GHz

### DESCRIPTION

This detector module works in the spectral range 800 - 1650 nm at the input power up to 10 mW at frequencies up to 2 GHz. It is equipped with an MM or SM fiber. Small size and weight allow for installing it on a PCB without additional mounting.

PDI-80-2G-K-RM is the module with optical matching. The space between a fiber and PD is filled with an index-matched medium.

PDI-80-2G-K-R50 provides low back reflection (<-50 dB).

Applications: high-speed optical communication systems.

### 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

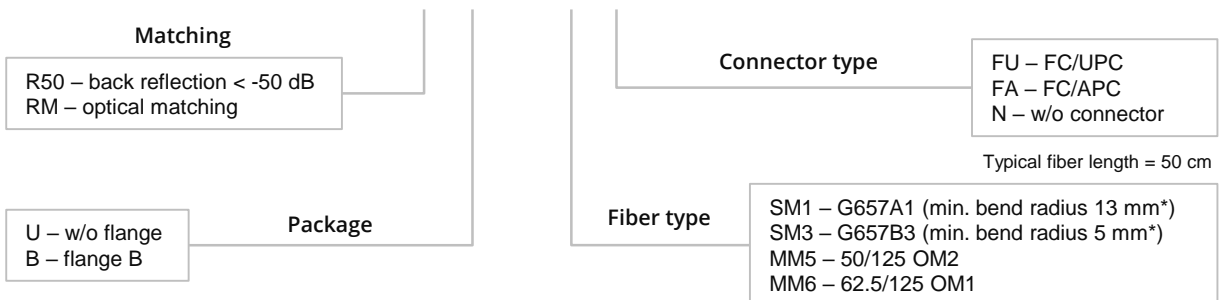
### ELECTRICAL-OPTICAL CHARACTERISTICS (SINGLE MODE, T = 25 °C)

Parameter	Min	Typ	Max	Unit	Test conditions
Responsivity	PDI-80-2G-K-R50	0.96	1.04	A/W	$\lambda = 1550 \text{ nm}, V_R = 5 \text{ V}$
	PDI-80-2G-K-RM	1.00	1.10		
Back reflection*	$R_L$	-50		dB	$\lambda = 1550 \text{ nm}$
Dark current	$I_d$	0.03	0.16	nA	$V_R = 5 \text{ V}$
Capacitance	$C_t$	0.95	1.1	pF	$V_R = 5 \text{ V}, f = 1 \text{ MHz}$
Cut-off frequency	$f_c$	2		GHz	$P_i = -10 \text{ dBm}, V_R = 5 \text{ V}, \text{ Small signal modulation}$
Breakdown voltage	$V_{BR}$	55		V	

\* for PDI-80-2G-K-R50

### ORDERING INFORMATION

## PDI-80-2G-K-X-X-7-X-X



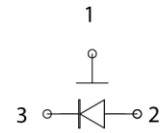
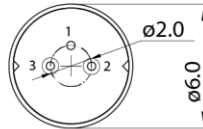
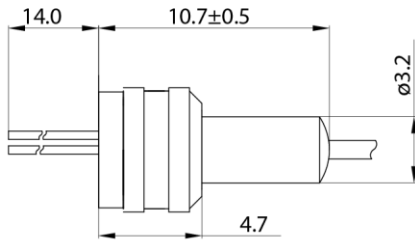
Our products are certified by Belarusian Chamber of Commerce. All the components used in production are ISO 9001:2008 certified and comply with RoHS directive. Characteristics, data, materials and structures specified in this datasheet are subject to change without notice.

\*Attenuation 0.1 dB/loop at 1550 nm

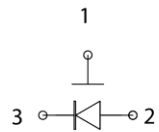
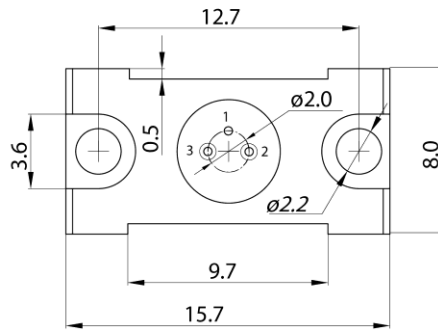
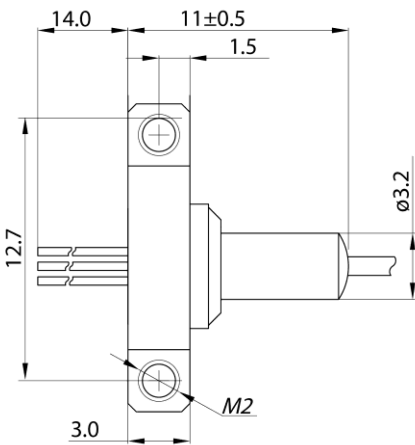
This document was updated on 31.08.2017

# PDI-80-2G-K

**U**



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



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

**B**

# PDI-80-2G-K

