

PDI-3P30-10G-W-R40

PIN photodiode module, 1000-1650 nm, 10 GHz, 30 mW

DESCRIPTION

This detector module works in the spectral range 1000 - 1650 nm at frequencies up to 10 GHz and an optical power up to 30 mW. It is equipped with an SM fiber and provides low back reflection < -40 dB. Small size and weight allow for installing it on a PCB without additional mounting.

Applications: high-speed optical communication systems.

ABSOLUTE MAXIMUM RATINGS

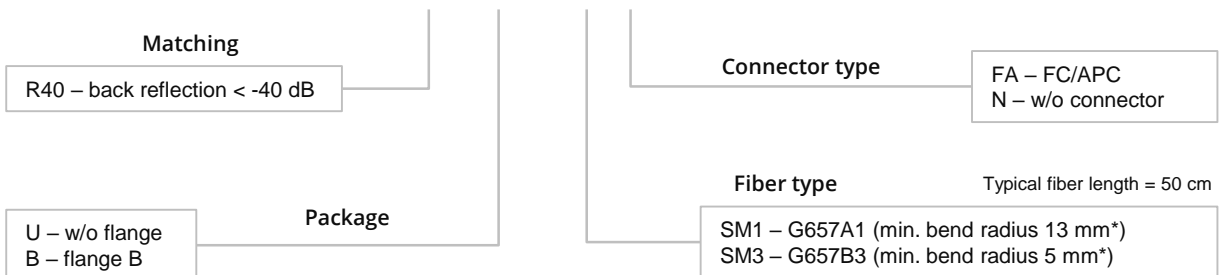
Parameter	Value	Unit
PD reverse voltage, V_r	5.5	V
PD forward current, I_f	30	mA
Operating temperature, T_c	-40 ÷ +80	°C
Storage temperature, T_{stg}	-40 ÷ +85	°C
Optical power, P	30	mW

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

Parameter	Min	Typ	Max	Unit	Test conditions	
Responsivity	S_λ	0.8	0.83	A/W	$\lambda = 1550 \text{ nm}$, $V_R = 5 \text{ V}$	
Operating voltage	V_{op}		5	V		
Back reflection	R_L		-45	-40	dB	$\lambda = 1550 \text{ nm}$
Dark current	I_d		1	1.5	nA	$V_R = 5 \text{ V}$
Capacitance	C_t		0.25	0.3	pF	$V_R = 5 \text{ V}$, $f = 1 \text{ MHz}$
Cut-off frequency	f_c		10	12	GHz	$\lambda = 1550 \text{ nm}$, $V_R = 5 \text{ V}$, $R_L = 50 \Omega$, -3 dB

ORDERING INFORMATION

PDI-3P30-10G-W-R40-X-5-X-X



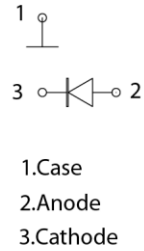
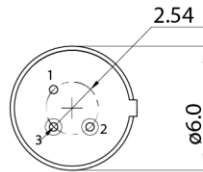
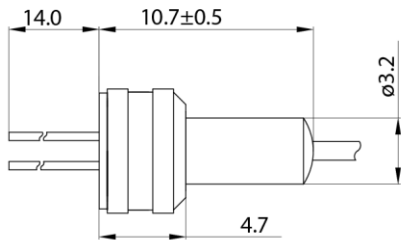
*Attenuation 0.1 dB/loop at 1550 nm

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.

This document was updated on 31.08.2017

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