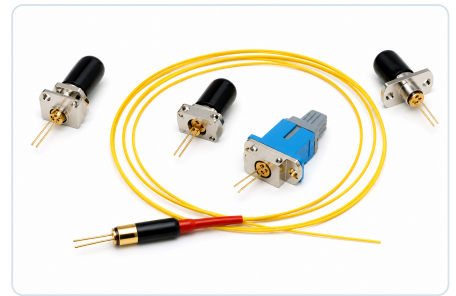


Single Mode & Polarization Maintaining Pigtailed Photodiodes

Hermetically packaged InGaAs PIN photodiodes with SM or PM pigtail, 1000–1650 nm response, and low dark current for high-sensitivity optical receivers



KEY FEATURES

- Planar semiconductor design and dielectric passivation
- 3-pin coaxial streamline packaging, SM or PM pigtail without connector
- Superior noise and photoelectric performance
- Hermetical packaging and 100% purge burn-in

ABSOLUTE MAXIMUM RATINGS

T = 25°C unless otherwise noted

PARAMETER	MIN	MAX	UNIT
Reverse Voltage	—	25	V
Input Optical Power	—	10	dBm
Reverse Current	—	5	mA
Forward Current	—	10	mA
Operating Temperature	−40	+85	°C
Storage Temperature	−40	+85	°C
Lead Solder Temperature	—	260	°C
Lead Soldering Duration	—	10	s
Fiber Yield Strength	—	1	kgf
Fiber Bend Radius	30	—	mm
Length of Pigtail	1.2	—	m

- A. ESD protection is imperative.
- B. Please shorten the length of the devices leads as much as possible.

ELECTRO-OPTICAL CHARACTERISTICS

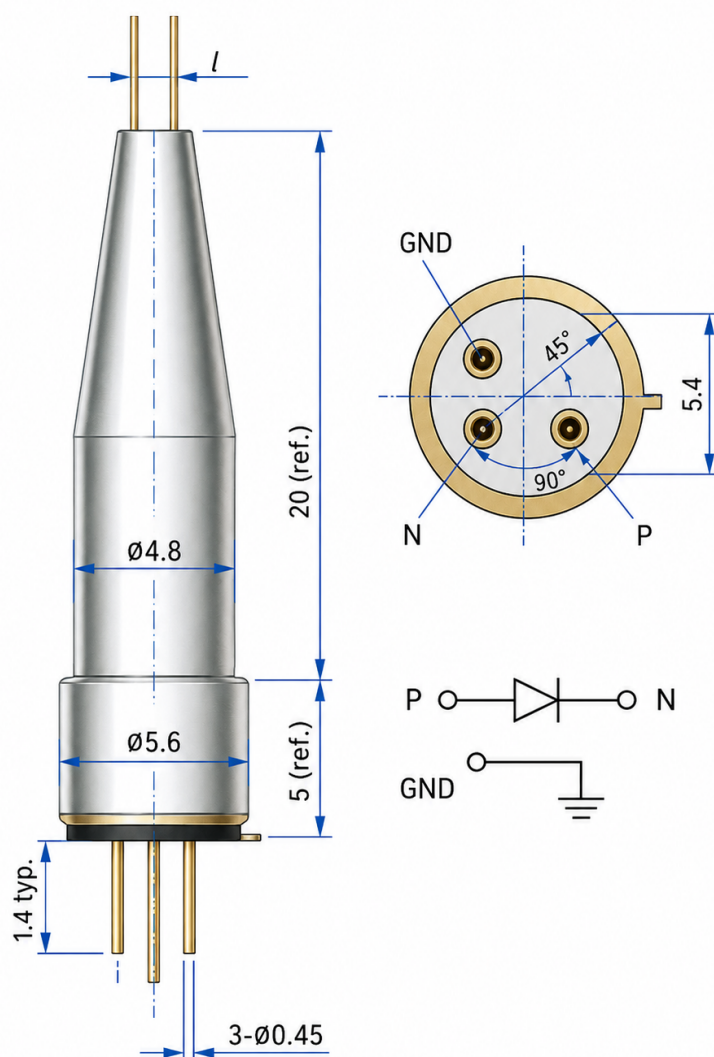
T = 25°C unless otherwise noted

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Wavelength	λ	—	1000	—	1650	nm
Dark Current	I_D	$E_e=0$, $V_R=5V$	—	0.2	0.5	nA
Responsivity	R_e	$V_R=5V$, $\lambda=1310$ nm	0.85	0.90	—	A/W
Responsivity	R_e	$V_R=5V$, $\lambda=1550$ nm	0.90	0.95	—	A/W
Capacitance	C	$f=1$ MHz, case grounded, $V_R=5V$, $E_e=0$	—	0.45	0.65	pF
Second Order Intermodulation Distortion	IMD2	$f_1=400$ MHz, $P_1=-3$ dBm; $f_2=450.25$ MHz, $P_2=-3$ dBm; $f_1+f_2=850.25$ MHz, $V_R=12V$, $MI=40\%$, $P_{avg}=0$ dBm, $R_{load}=50\Omega$	—	−75	−70	dBc
Operating Voltage	V_{opr}	—	—	−5	−15	V
Back Reflection	RL	—	—	—	−40	dB
Frequency Responsibility	BW	$V_R=5V$, 50Ω load, lead length=6 mm, case open	3	—	—	GHz

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PACKAGE DIMENSIONS & PIN CONNECTIONS

Dimensions in millimeters (mm) — 3-pin coaxial TO package with P / N / GND pin-out and equivalent circuit — drawing not to scale for reproduction