

PART NUMBER
FD2000W

Large Area InGaAs PIN Photodiodes
diameter of active area=2 mm

DESCRIPTION

Large area, high sensitivity photodiode for use in infrared instrumentation and sensing applications. High spectral response in the region 800 nm to 1700 nm. High shunt resistance allows high sensitivity to low level optical signals. The photosensitive area is 2 mm in diameter. Planar-passivated device structure.

ABSOLUTE MAXIMUM RATINGS (T=25°C)

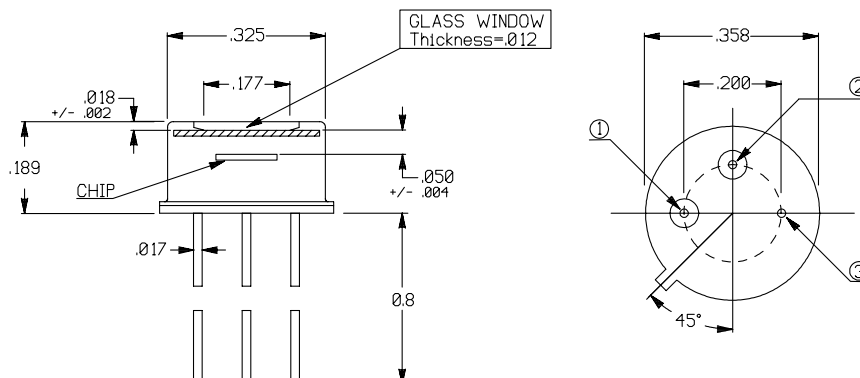
PARAMETER	RATING	UNITS
Storage Temperature	-40 to +100	°C
Operating Temperature	-40 to +85	°C
Forward Current	50	mA
Reverse Current	10	mA
Reverse Voltage	2	V

OPTICAL AND ELECTRICAL CHARACTERISTICS (T=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Responsivity	R	$\lambda = 1300 \text{ nm}$	0.80	0.90	-	A/W
		$\lambda = 1550 \text{ nm}$	0.90	0.95	-	
Shunt Resistance ^①	R_s	$V_R=0V$	1	10	-	M Ω
Capacitance	C	$V_R=0V$	-	400	1000	pF

① Very High Shunt Resistance devices are available upon request.

DIMENSIONAL OUTLINE



(dimensions in inches)

1	ANODE
2	CATHODE
3	CASE



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TYPICAL CHARACTERISTICS

Fig. 1 Spectral Response (R vs. λ)

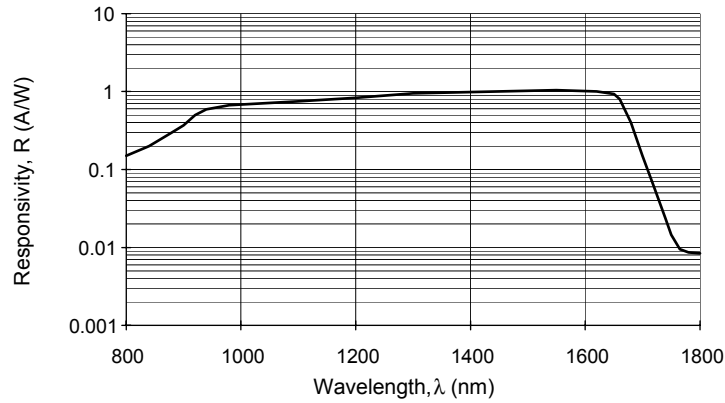


Fig. 2 Dark Current vs. Reverse Voltage

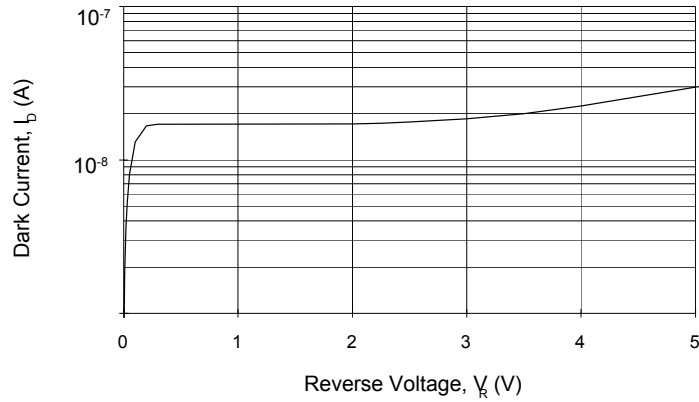


Fig. 3 Capacitance vs. Reverse Voltage

