



PF512



TECHNICAL DATA

FC InGaAs Photodiode

PF512 is an InGaAs PIN structure based photodiode with FC connector and ball lens. An internal optical attenuator allows measurements up to 20 dBm with a normal spectral range of 1,0 – 1,65 μm and an extended range of 0,65 – 1,65 μm .

Absolute Maximum Ratings

Item	Symbol	Value	Unit
Reverse Voltage	U_R	25	V
Optical Current	I_{PD}	10	mA
Forward current	I_F	10	mA
Power Dissipation	P_D	100	mW
Operating Temperature	T_{opr}	-40 ... +85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40 ... +85	$^{\circ}\text{C}$
Soldering Temperature *	T_{sol}	260	$^{\circ}\text{C}$

* must be completed within 10 seconds

Specifications (25 $^{\circ}\text{C}$)

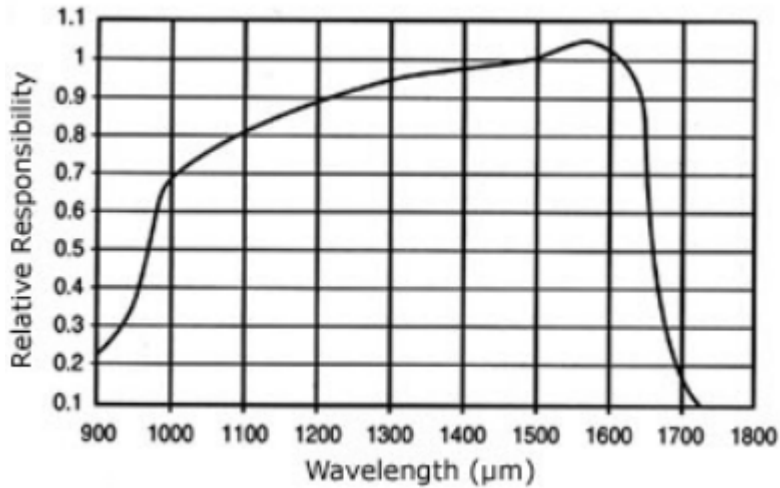
Item	Value	Unit
Wavelength Range	1.00 - 1.65	μm
Sensitive Area	\varnothing 300	μm
Linear Range	-50... +20	dBm
Responsibility (0 V)	850 nm	≥ 0.20
	1310 nm	≥ 0.75
	1550 nm	≥ 0.80
Capacitance (-5 V)	≤ 12	pF
Dark Current (-5 V)	≤ 5	nA
Operating Voltage	0... -10	V
Inserting Deviation	± 0.1	dB
Inserting lifetime	10^5	h



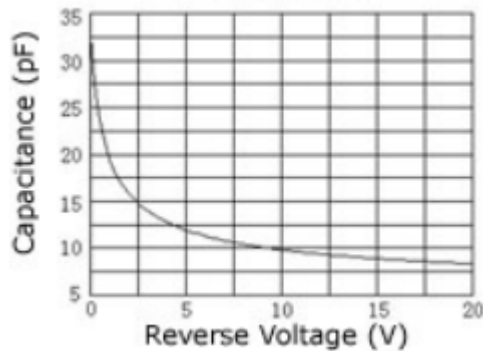


Typical Performance

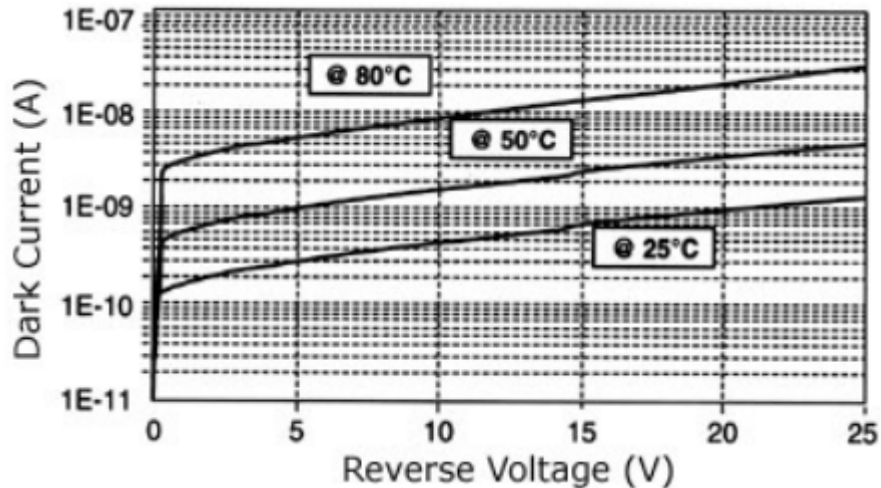
Relative responsivity vs wavelength



Capacitance vs reverse voltage



Dark current vs reverse voltage





Outline Dimensions

