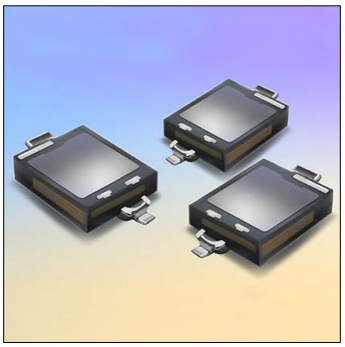
Surface Mount Photodiode

ODD-8SMD



FEATURES

- High Sensitivity
- Low Capacitance
- Short Switching Time
- Surface Mount Package

Electro-Optical Characteristics at 25°C

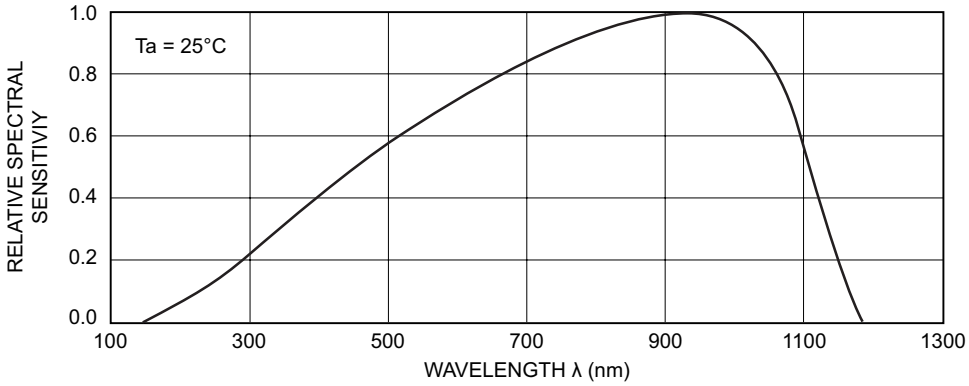
Parameters	Test Conditions	Min	Typ	Max	Units
Range of Spectral Bandwidth, $\lambda_{0.5}$		400		1100	nm
Wavelength of Peak Sensitivity, λ_P			940		nm
Responsivity	λ_P = 940 nm		0.44		A/W
Reverse Dark Current, I_P	V_R = 10 V		5		nA
Reverse Breakdown Voltage, B_{VR}	I_R = 100 µA	32	170		Volts
Total Capacitance, C_t	V_R = 3 V, f = 1 MHz		25		pF
Rise/Fall Time, t_r/t_f	V_R = 10 V, RL = 1 KΩ		50/50		nsec

Thermal Parameters

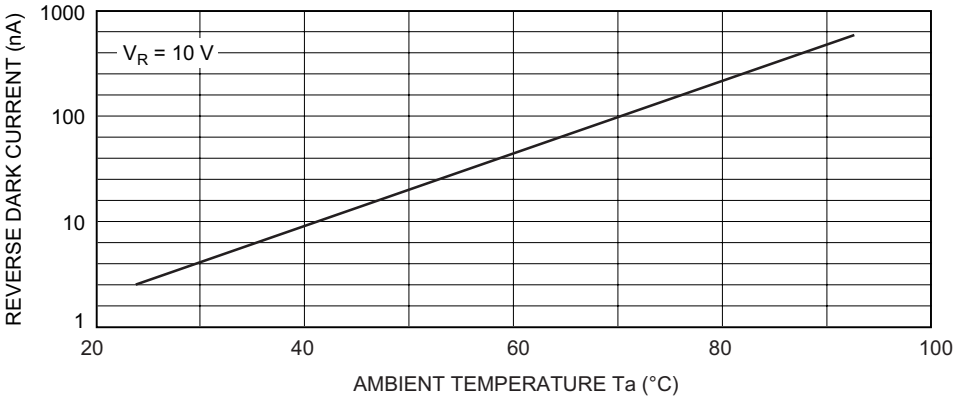
Parameters	Units
Operating Temperature Range	-25°C to +85°C
Storage Temperature Range	-40°C to +85°C
Power Dissipation at (or below) 25°C Free Air Temperature	150 mW
Soldering Temperature[1] (soldering time 5 sec max)	260°C

Note: Minimum direct order quantity 10,000 pieces.

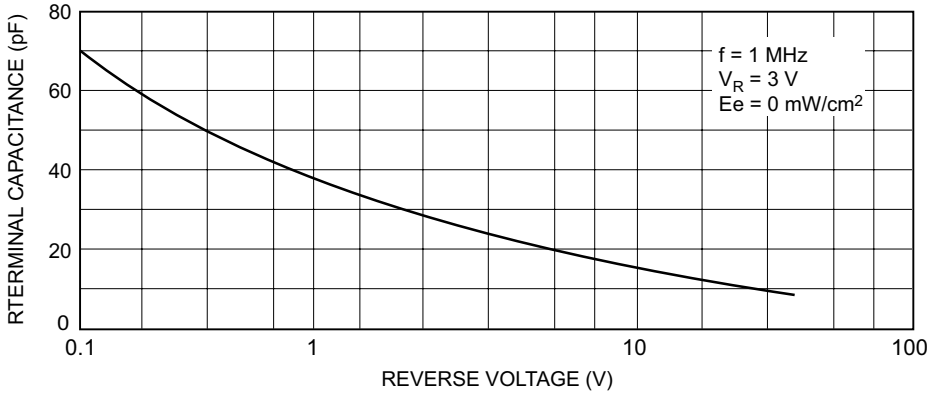
Spectral Sensitivity



Dark Current vs Ambient Temperature

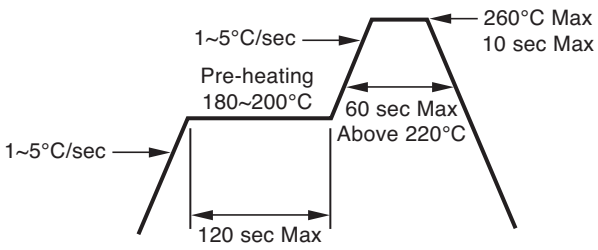


Terminal Capacitance vs Reverse Voltage



[1] Soldering Conditions

1.0 Pb-free solder temperature profile



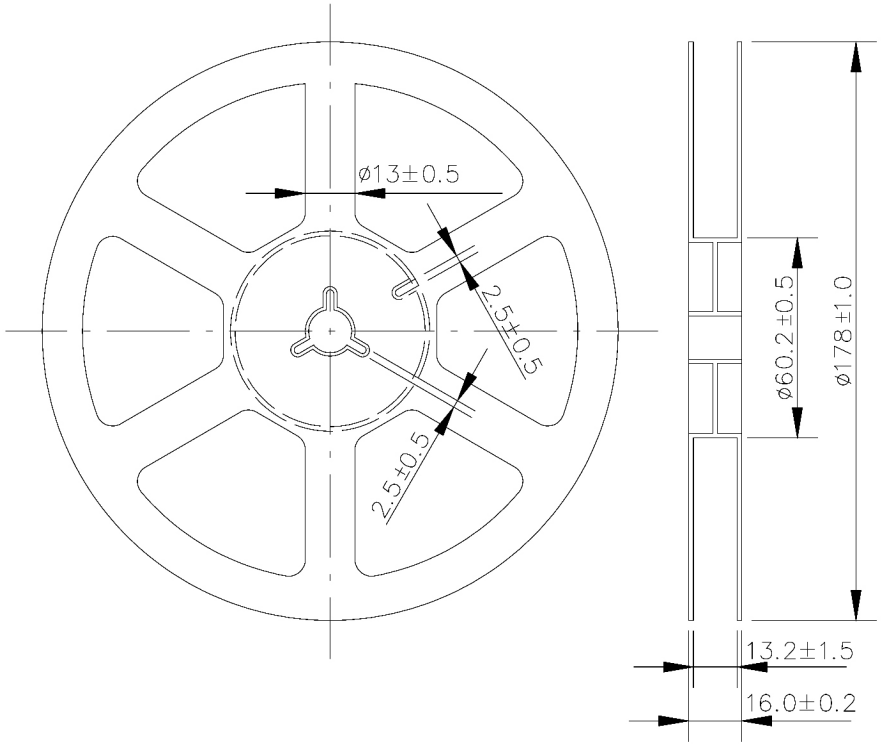
1.1 Reflow soldering should not be done more than twice
1.2 Do not stress the PD while soldering
1.3 Don't flex the circuit board after soldering

2.0 Soldering Iron

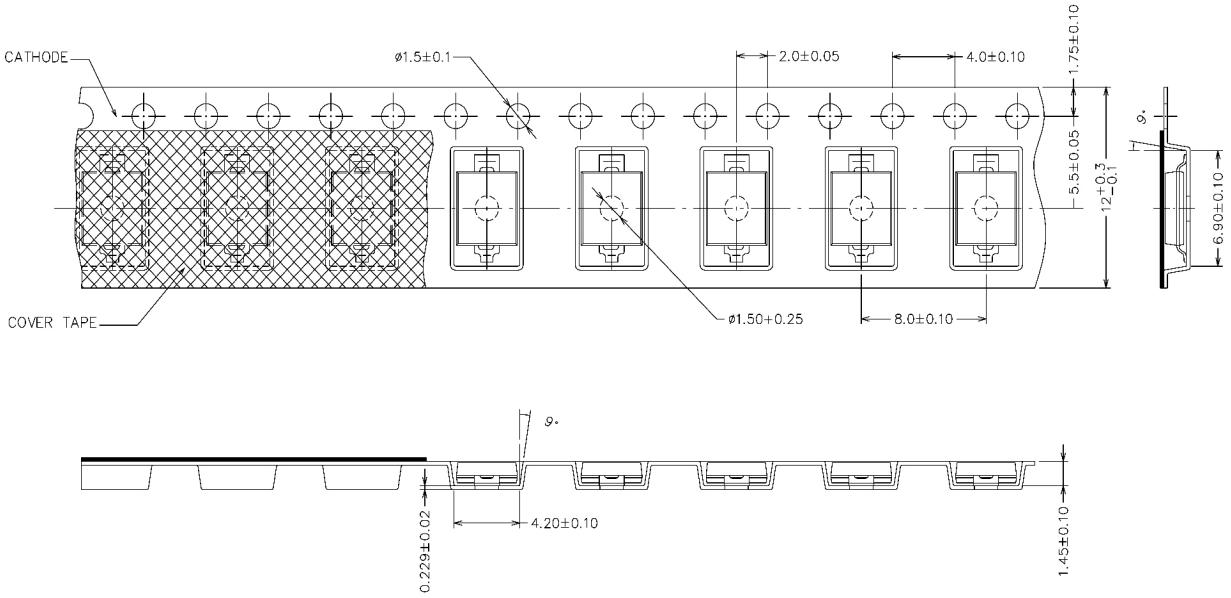
2.1 Each terminal should touch the tip of soldering iron (at 280°C) for less than for three seconds. Use a minimum two second interval between soldering each terminal. Use caution as product damage is often started during hand soldering.

2.2 The tip of soldering iron (at 280°) should be in contact with each terminal for less than three seconds. Pause for a minimum two second interval between soldering each terminal. Use caution as damage to the PD is often started during hand soldering.

Package Dimensions

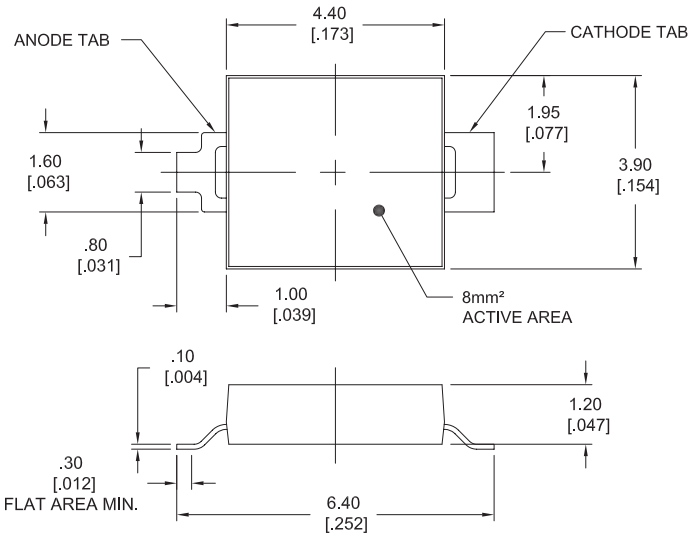


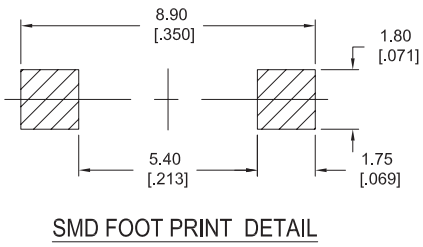
Loaded Quantity Per Reel 1000 PCS/Reel



Dimensions are in mm units.

Package Dimensions





SMD FOOT PRINT DETAIL

Dimensions are in metric [inch] units.

Specifications are subject to change without prior notice.