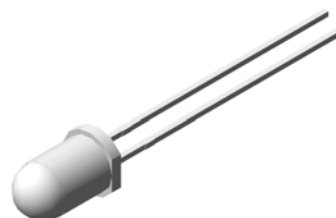


5mm Round Package Silicon Photodiode

OD T538

Features

- High radiant sensitive
- Low junction capacitance
- Wide radiant sensitive area
- Fast respond speed.
- Pb free
- Lens in water clear



Applications

- Industrial electronics
- Measurement
- Control Circuit
- Interrupter



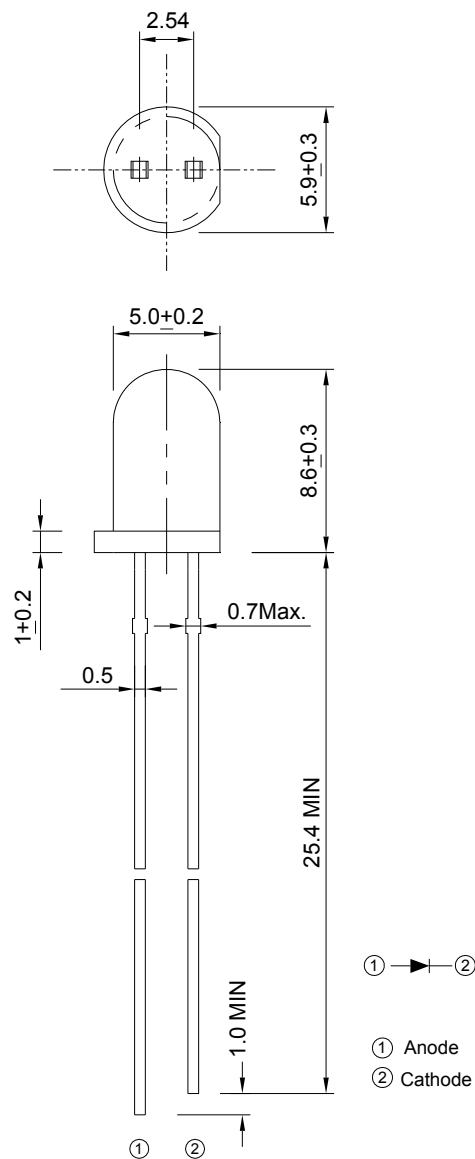
Absolute Maximum Rating at Ta=25°C, unless otherwise specified

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	32	V
Power Dissipation	P_d	150	mW
Operating Temperature Range	T_{opr}	-40 to + 85	°C
Storage Temperature	T_{stg}	-40 to + 85	°C
Soldering Temperature	T_{sol}	260+/- 5 for 5 sec	°C

Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life- span and may cause LED to fail.

Package Dimension:

unit: mm



Notes:

1. All dimensions are millimeters.
2. Tolerance is $\pm 0.2\text{mm}$ unless otherwise specified.
3. Specifications are subject to change without notice.

Optical Characteristics at Ta=25°C, unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Open Circuit Voltage	$E_e = 5\text{mW/cm}^2$ $\lambda_p = 940\text{nm}$	V_{oc}	---	0.4	---	V
Short Circuit Current	$E_e = 1\text{mW/cm}^2$ $\lambda_p = 940\text{nm}$	I_{sc}	---	40	---	μA
Dark Current	$E_e = 0\text{mW/cm}^2$ $V_R = 10\text{V}$	I_D	---	5	30	nA
Reverse Light Current	$E_e = 1\text{mW/cm}^2$ $\lambda_p = 940\text{nm}$ $V_R = 5\text{V}$	I_L	36	40	---	μA
Total Capacitance	$E_e = 0\text{mW/cm}^2$ $V_R = 5\text{V}$ $f = 1\text{MHz}$	C_t	---	18	---	pF
Reverse Breakdown Voltage	$E_e = 0\text{mW/cm}^2$ $I_R = 100\mu\text{A}$	BV_R	32	175	---	V
Range of Spectral Bandwidth	---	$\lambda_{0.5}$	400	---	1100	nm
Wavelength of Peak Sensitivity	---	λ_p	---	940	---	nm
Viewing Angle	$I_F = 20\text{mA}$	$2\theta_{1/2}$		80		degree
Rise Time	$V_R = 10\text{V}$, $R_L = 100\Omega$	t_r	---	45	---	nS
Fall Time		t_f		45	---	

Optical Characteristics Curves

