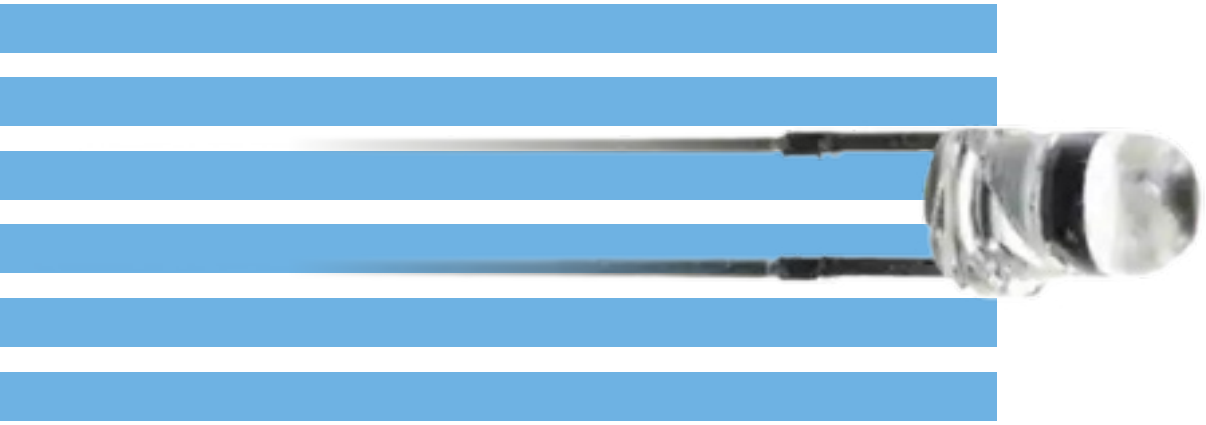


PDB-C134

Silicon Photodiode

The PDB-C134 is a blue enhanced PIN silicon photodiode in a photoconductive mode packaged in a water clear T1 plastic package.

Applications

- Smoke Detectors
- Light Pen Detectors
- TV & VCR Remotes
- Bar Code Detectors

Features

- Large Active Area
- Photoconductive
- High Speed
- Low Cost

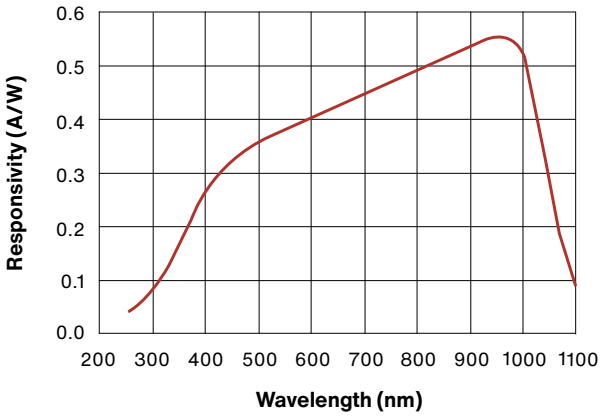
Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Reverse Voltage	V_R	-	100	V
Wavelength Range	-	400	1100	nm
Operating Temperature	T_{OP}	-40	+80	°C
Storage Temperature	T_{STG}	-55	+100	°C
Package		T1		

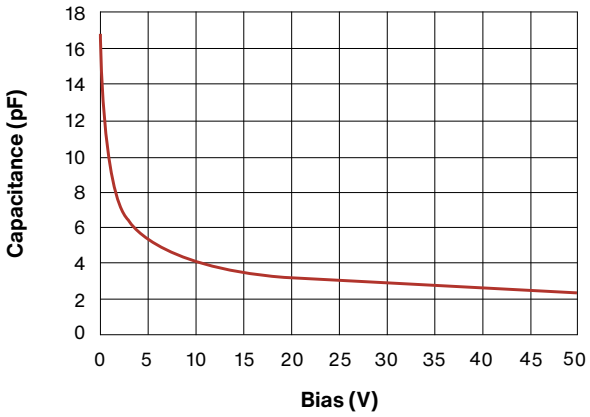
Typical Electro-Optical Specifications at T_A=23 °C

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Short Circuit Current	H=100 fc, 2850K	I_{SC}	50	60	-	µA
Dark Current	V_R=10V	I_D	-	2	30	nA
Shunt Resistance	V_R=10mV	R_{SH}	0.5	2	-	GΩ
Junction Capacitance	V_R=10V;f=1MHz	C_J	-	6	10	pF
Spectral Application Range	Spot Scan	λ	400	-	1100	nm
Breakdown Voltage	I=10µA	V_{BD}	50	100	-	V
Noise Equivalent Power	V_R=10V @ λ=Peak	NEP	-	$1.8x10^{-13}$	-	W/ √ Hz
Response Time	R_L=1KΩ, V_R=50V	T_R	-	10	-	nS

Spectral Response

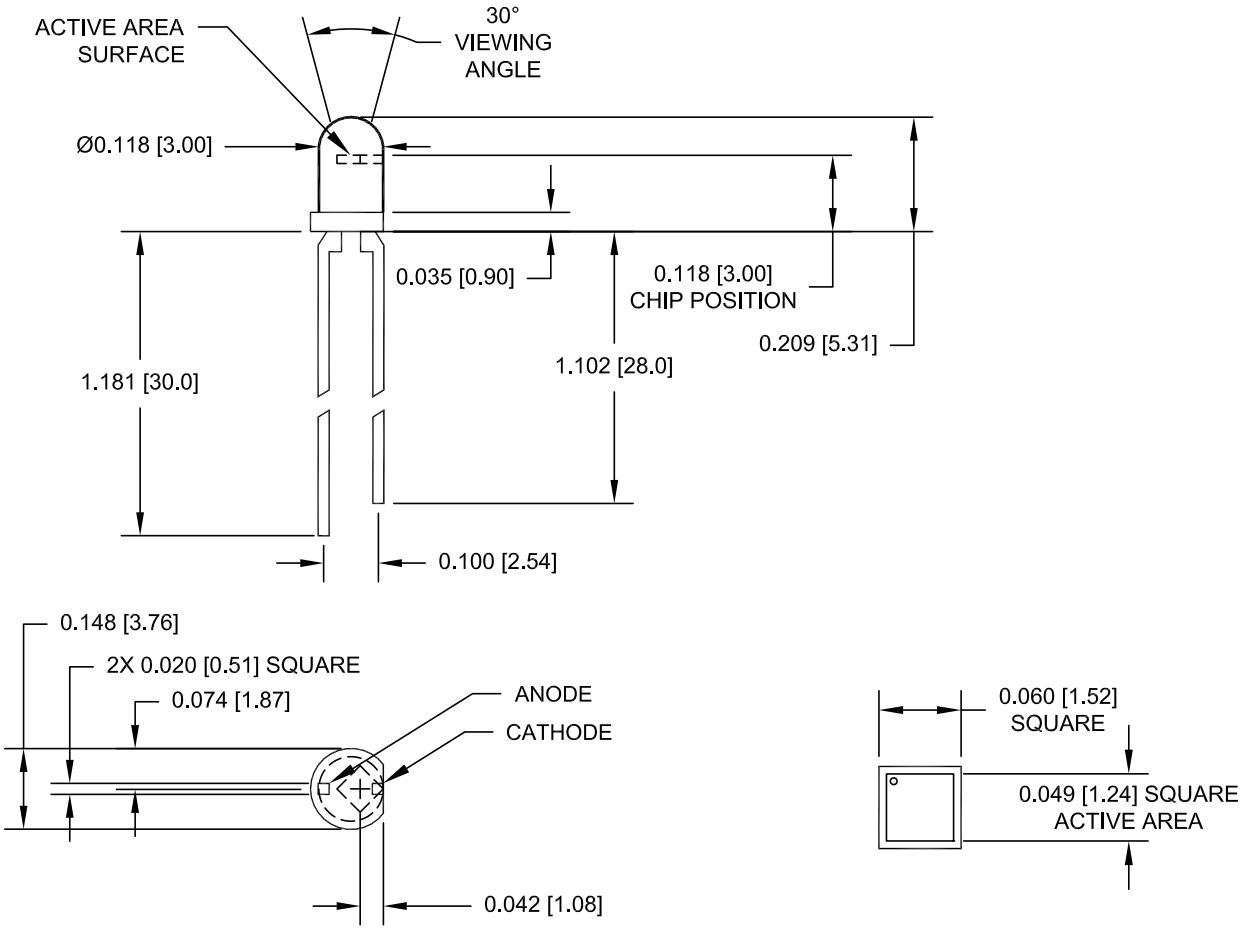


Capacitance vs Bias



Mechanical Specifications

Units are in mm



Soldering Conditions: 260˚C 1/16 inch away from case for 3 seconds max.