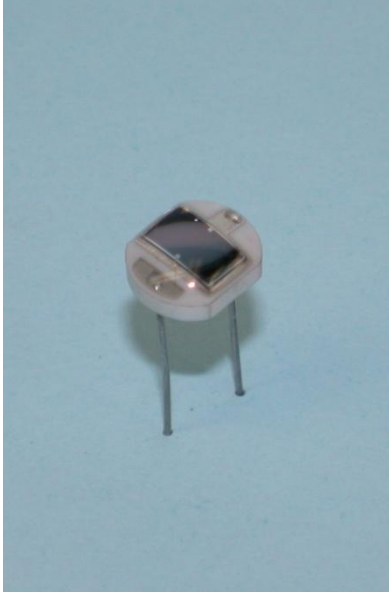


PDB-C107 Silicon Photodiode



FEATURES

- Low Noise
- Visible-NIR Sensitive
- High Shunt Resistance
- High Response

DESCRIPTION

The **PDB-C107** is a 17.9mm² PIN silicon photodiode packaged in a ceramic package.

APPLICATIONS

- Industrial
- Instrumentation
- Medical

> Absolute Maximum Ratings

Symbol	Min		Max	Units	T _A = 23°
Reverse Voltage	-	-	75	V	-
Operation Temperature	-40	to	+100	°C	-
Storage Temperature	-40	to	+100	°C	-
Soldering Temperature*	-	-	+240	°C	-

NOTES:

* 1/16 inch from case for 3 seconds max.

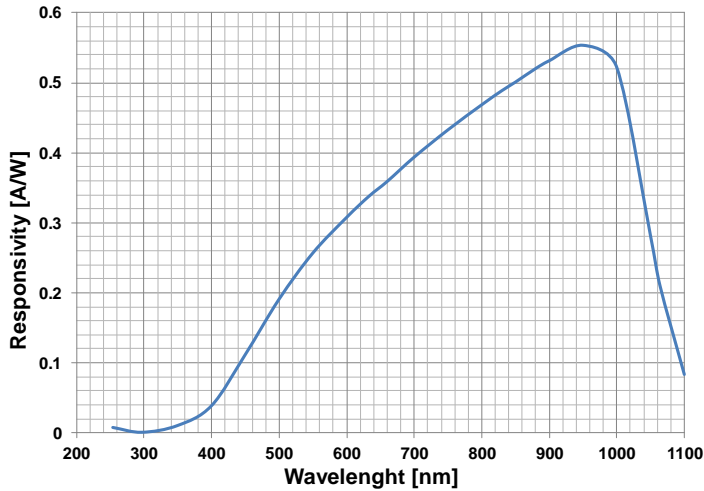
PDB-C107 Silicon Photodiode

> Electrical and Optical Characteristics

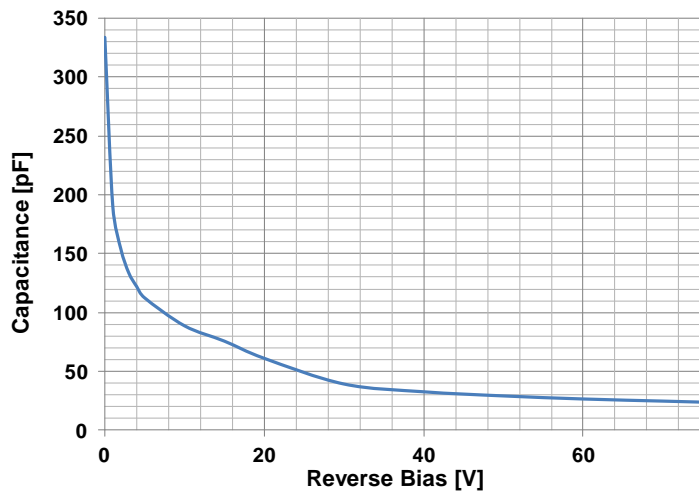
Typical Characteristics (T=25 C unless specified)

Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Short Circuit Current	H = 100 fc, 2859 K	I_{SC}	170	-	-	μA
Dark Current	$V_R=5V$	I_D	-	150	300	nA
Shunt Resistance	$V_R=10mV$	R_S	200	1000	-	$M\Omega$
Junction Capacitance	$V_R=10V, f=1MHz$	C_J	-	100	-	pF
Spectral Application Range	Spot Scan	λ	350	-	1100	nm
Responsivity	$\lambda=500nm, V, V_R=0V$	-	0.15	0.19	-	A/W
Breakdown Voltage	$I=10\mu A$	V_B	75	100	-	V
Noise Equivalent Power	$V_R=0v @ \lambda=PEAK$	NEP	-	3×10^{-13}	-	W/\sqrt{Hz}
Response Time*	$R_L=50\Omega, V_R=0V$	T_R	190	190	-	ns
	$R_L=50\Omega, V_R=10V$		-	13	-	

> Spectral Response



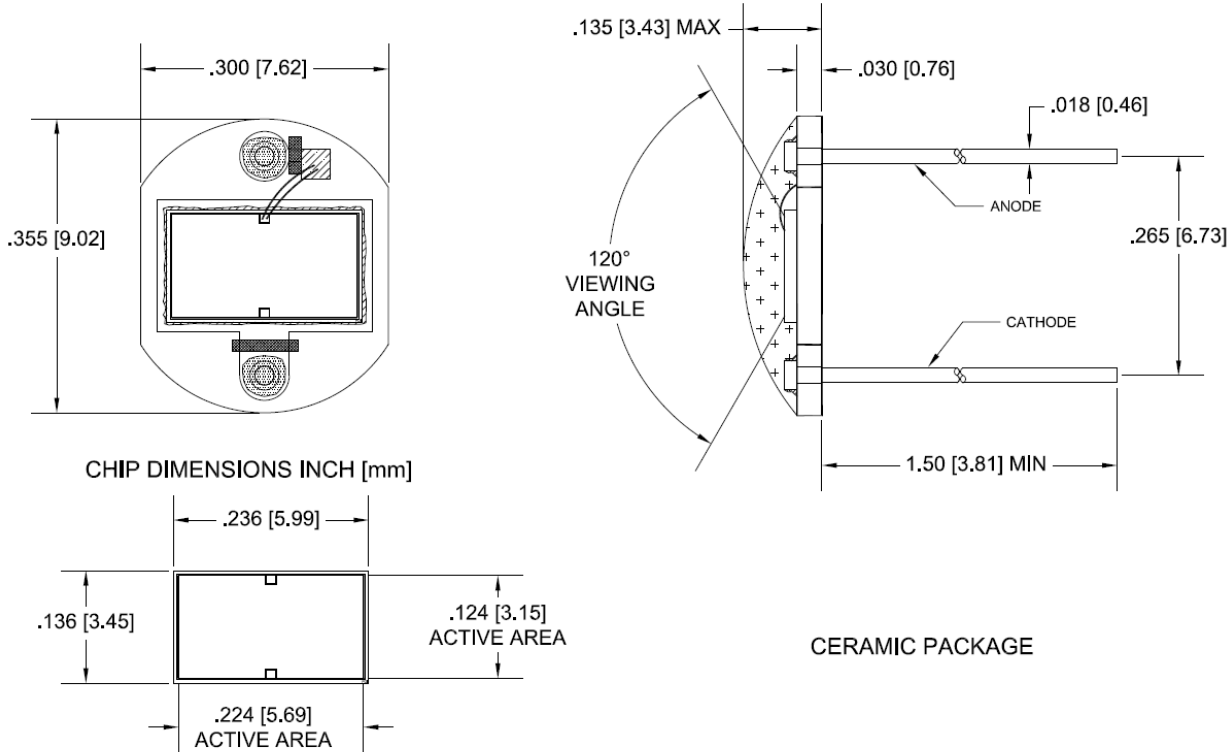
> Capacitance vs. Reverse Bias



PDB-C107 Silicon Photodiode

> Package Drawing

PACKAGE DIMENSIONS INCH [mm]



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MATERIALS SAFETY

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.