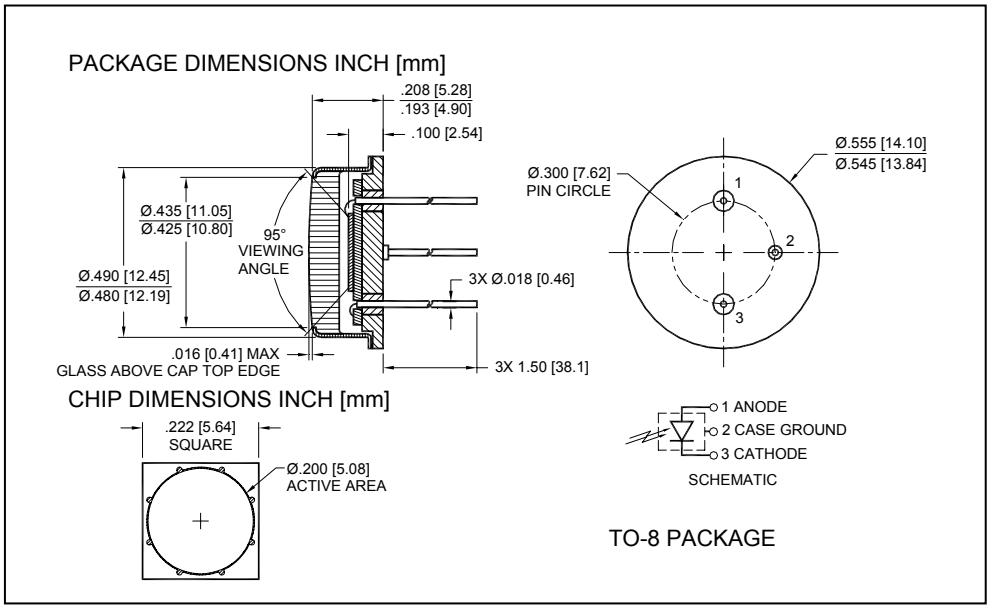
Red Enhanced Silicon Photodiode
SD 200-11-21-241



FEATURES

- Low noise
- Red enhanced
- High shunt resistance
- High response

DESCRIPTION

The **SD 200-11-21-241** is a general purpose silicon PIN photodiode, red enhanced, packaged in a leaded hermetic TO-8 metal package.

APPLICATIONS

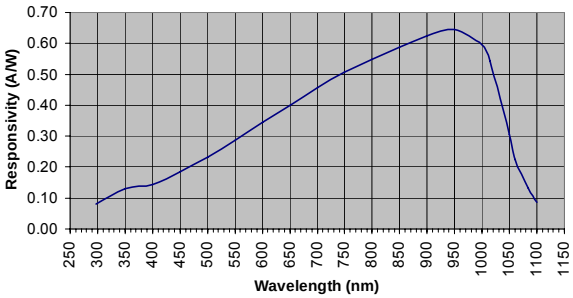
- Instrumentation
- Industrial
- Medical

ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		75	V
T_{STG}	Storage Temperature	-55	+150	°C
T_O	Operating Temperature	-40	+125	°C
T_S	Soldering Temperature*		+240	°C

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

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_D	Dark Current	V_R = 5V		6.5	26.0	nA
R_{SH}	Shunt Resistance	V_R = 10 mV	70			MΩ
C_J	Junction Capacitance	V_R = 0V, f = 1 MHz		345		pF
		V_R = 10V, f = 1 MHz		71		
λrange	Spectral Application Range	Spot Scan	350		1100	nm
R	Responsivity	λ= 633nm, V_R = 0 V	0.32	0.36		A/W
		λ= 900nm, V_R = 0 V	0.50	0.55		
V_{BR}	Breakdown Voltage	I = 10 μA		50		V
NEP	Noise Equivalent Power	V_R = 5V @ λ=950nm		$8.6X10^{-14}$		W/ $\sqrt{}$ Hz
t_r	Response Time**	RL = 50 Ω, V_R = 0 V		190		nS
		RL = 50 Ω, V_R = 10 V		13		

**Response time of 10% to 90% is specified at 660nm wavelength light.

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.

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