



JIC 0.1 E17 SiC Photodetector

CHARACTERISTICS

Spectral range	210 to 380	nm
Active area	0.055	mm ²
High UV-responsivity	1.2	mV/nW
Single Supply Voltage		
Option of External Connection of Photodiode		

APPLICATIONS

UV measurement only
Control of sterilization lamps
Flame detection and control

MAXIMUM RATINGS

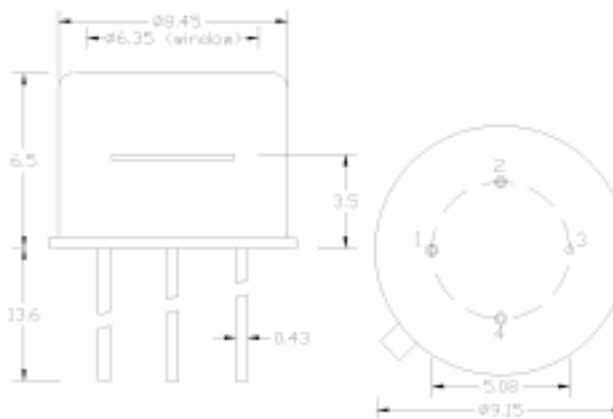
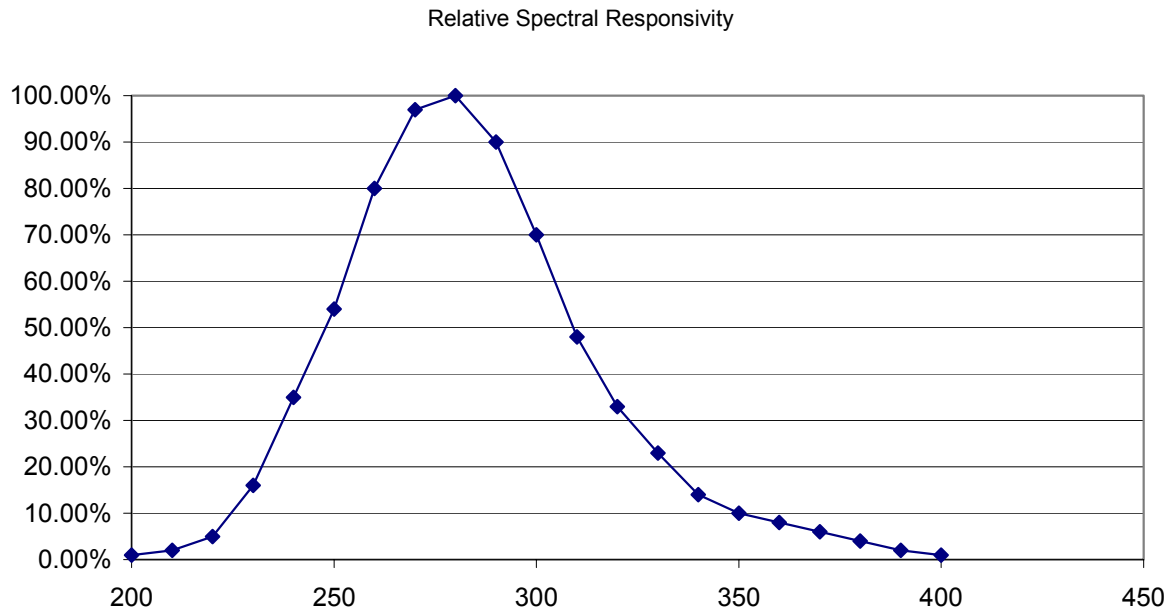
Maximum operating voltage	+16	V
Power consumption	180	mW
Operating temperature range	-25 to 70	°C
Storage temperature range	-40 to 100	°C
Soldering temperature (3s)	260	°C

TECHNICAL DATA

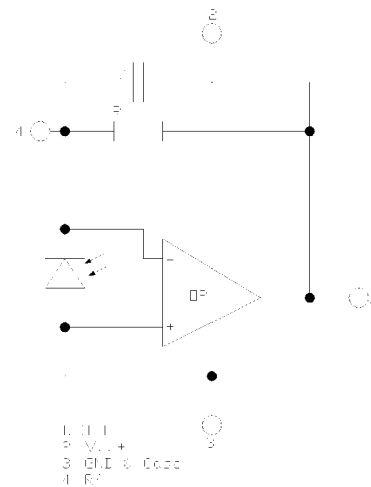
Common test conditions, if not otherwise specified: $\gamma_a = 23^\circ\text{C}$, $V_{CC} = +5\text{V}$

Parameter	Test conditions	Min.	Typ.	Max	Unit
Dark offset voltage			+/-1	+/-5	mV
Saturation voltage			+4.5		V
Noise voltage	B = 200Hz		0.5		mV _{rms}
Absolute spectral responsivity	$\lambda = 254\text{nm}$		0.8		mV/nW
Transimpedance			10		M Ω
Bandwidth	-3 dB		500		Hz
Operating voltage		+/-3	+/-5	+/-12	V
Current Consumption			200	250	μA





Package Dimensions



Internal Circuit

Application Note:

- If an external resistor for reduction of response is used, make sure that the wire lengths are as small as possible to reduce noise and capacitance interference.
- If only internally adjusted gain is used, please cut pin 4.

