



JIC 0.1 E9 SiC Photodetector

CHARACTERISTICS

Spectral range	210 to 390	nm
Active area	0.055	mm ²
High UV-responsivity	120	mV/nW
Externally adjustable gain		

APPLICATIONS

UV measurement only
UV source control (for instance in sterilizers)
Flame detection

MAXIMUM RATINGS

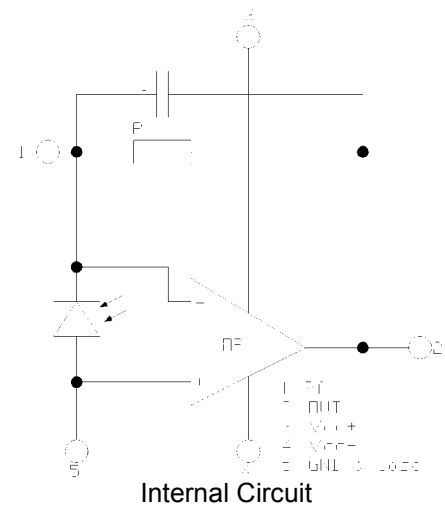
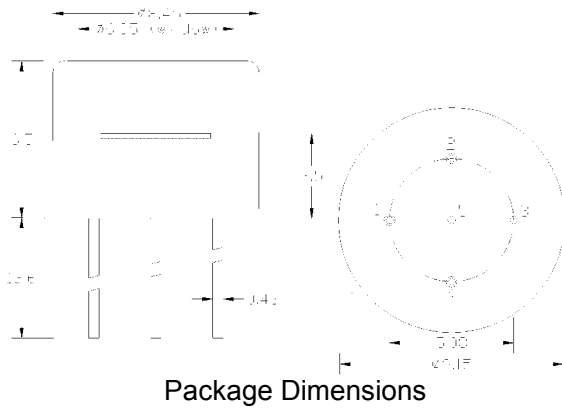
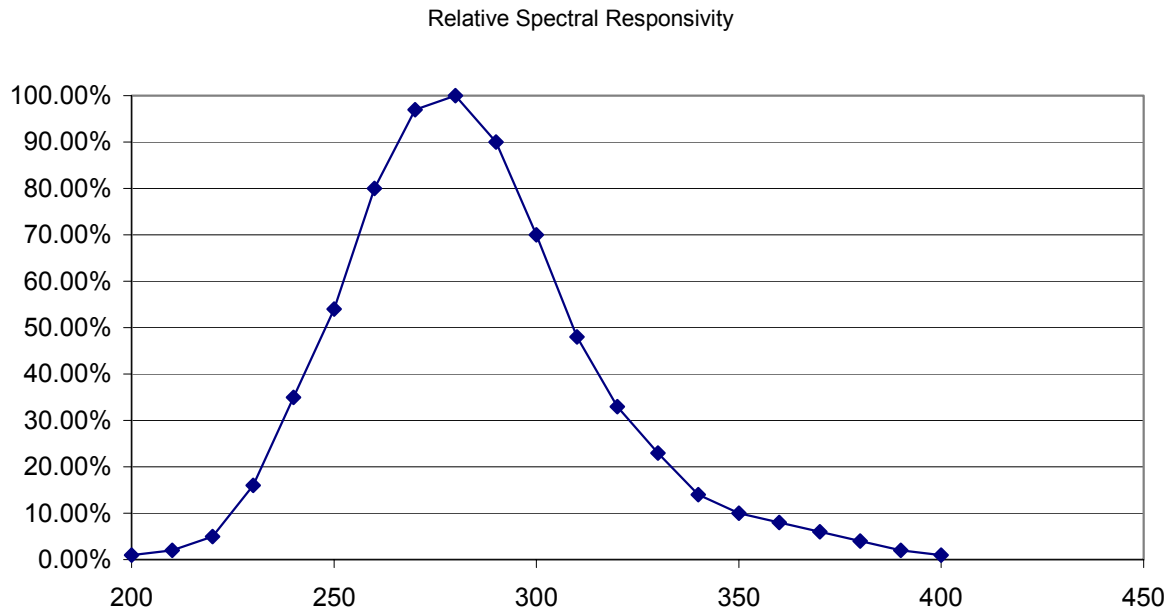
Maximum operating voltage	+/-18	V
Power consumption	180	mW
Operating temperature range	-25 to 70	°C
Storage temperature range	-40 to 100	°C
Soldering temperature (3s)	260	°C

TECHNICAL DATA

Common test conditions, if not otherwise specified: $T_a = 25^{\circ}\text{C}$, $V_{CC} = +5\text{V}$

Parameter	Test conditions	Min.	Typ.	Max	Unit
Dark offset voltage	$E = 0 \text{ lx}$		+/-1	+/-5	mV
Saturation voltage			+13.5		V
Noise voltage			0.5		mV _{rms}
Absolute spectral responsivity	$\lambda = 254\text{nm}$		80		mV/nW
Feedback resistor			1		GΩ
Risetime			0.5		ms
Bandwidth	-3 dB		500		Hz
Operating voltage		+/-5	+/-15	+/-18	V
Current Consumption			+/-3		mA





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 1.

