



JIC 0.1 EI18 SiC Photodetector

CHARACTERISTICS

Spectral range	210 to 380	nm
Active area	0.055	mm ²
High UV-responsivity	8	mV/nW
Externally adjustable gain		
Single supply voltage		
Package isolated to ground		

APPLICATIONS

UV measurement only
Control of sterilization lamps

MAXIMUM RATINGS

Maximum operating voltage	+15	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			+4.5		V
Noise voltage	$B = 1 \text{ kHz}$		0.5		mV _{rms}
Absolute spectral responsivity	$\lambda = 254 \text{ nm}$		8		mV/nW
Feedback resistor			100		MΩ
Bandwidth	-3 dB		1		kHz
Operating voltage		+/-3	+/-5	+/-12	V
Current Consumption			200	250	μA



