



Blue Lotus
Micro Devices

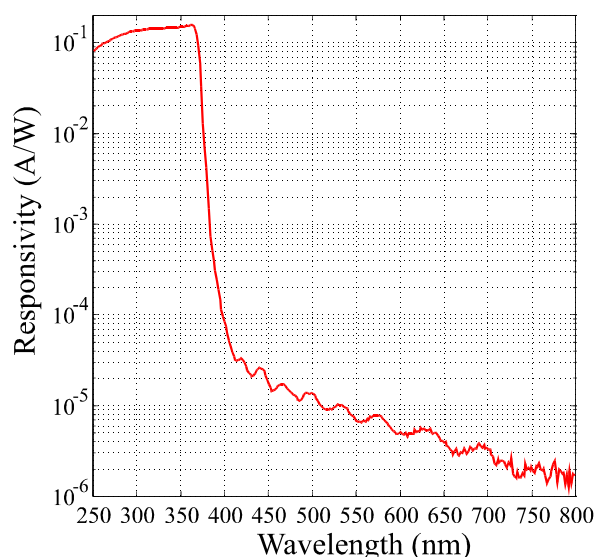
GaN p-i-n photodiodes Ultraviolet Photodetectors

Gallium Nitride (GaN) **p-i-n** photodiodes are new ultraviolet photodetectors that offer high quantum efficiency [typically 40% at 360 nm], high speed [DC to ~20 MHz for a 0.50 mm² device] and high responsivity at wavelengths less than 360 nm with high **rejection of response** to visible and infrared wavelengths.

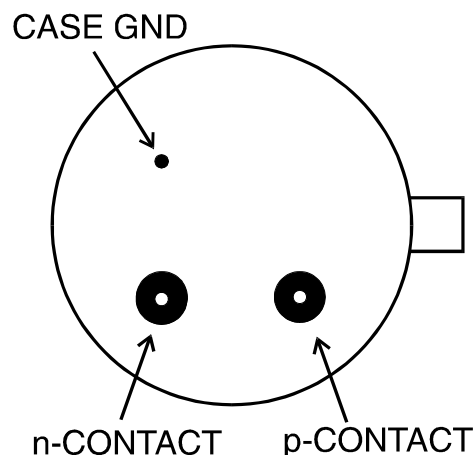
Applications:

UV Curing and Drying Control	Combustion Monitoring
Arc Detection	Solar Irradiance Measurement
Phototherapy Control	Sterilization and Purification Control
Spectroscopy	

Spectral Responsivity



TO-46 package



Performance Parameters:

Active area	0.50 mm ² (0.80 mm diameter)
Responsivity @ 360 nm	>0.1 Amp/Watt (QE>28%)
Responsivity @ 250 nm	>0.05 Amp/Watt (QE>20%)
Shunt resistance (-10 mV)	>100 MΩ
Series resistance	<250 Ω
Frequency response	DC to >18 MHz (-3 dB)
Junction capacitance	~35 pF
Package type	TO-46 with Schott UV glass cap, λnm - other packages (SMT, TO8, etc.) and other windows, (fused silica, sapphire, windowless) available

