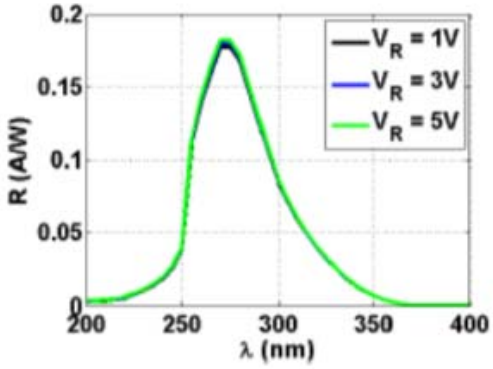
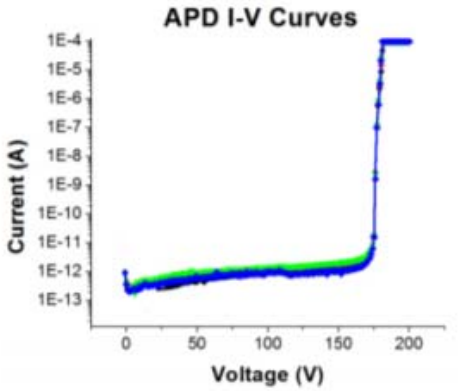
Silicon Carbide UV Avalanche Photodiode (APD)

Electro Optical Components introduces UV Solar Blind Silicon Carbide (SiC) Avalanche Photodiode (APD) for low signal applications in the UV range.





The Silicon Carbide (SiC) UV APD has many of the properties of other APDs in that it is extremely sensitive and has high signal gain, but is only sensitive to UV (see wavelength response curve above). Because the substrate is tougher SiC, the bias voltage is higher than silicon based devices, around 180 VDC. These SiC UV APDs are a solid state replacement for UV PMTs (Photo Multiplier Tubes). Besides responding only to the UV, the tough silicon carbide (SiC) provides:

- Stability in high energy UV applications
- Higher temperature stability than silicon

The general specifications are:

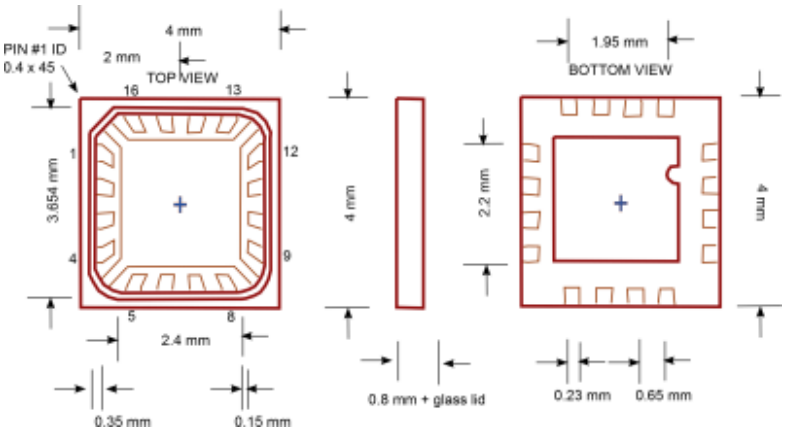
- Sensitivity: 1 nW/cm^2
- Gain: 10^5 – 10^6
- Bias Voltage: ~180 VDC
- APD Size: 1.2mm^2
- Package: QFN-16 (4mm x 4mm); Pin 11 + Positive, Pin 2 – Negative

The SiC UV APD is ideal for a variety of low UV light applications including:

- Flame detection
- UV photon counting
- Low level UV monitoring

EOC SiC UV APD 1.45-QFN-16

in QFN-16 package



EOC SiC UV APD 1.45-QFN-PCB

QFN-16 mounted on a PCB