FILTER DETECTORS

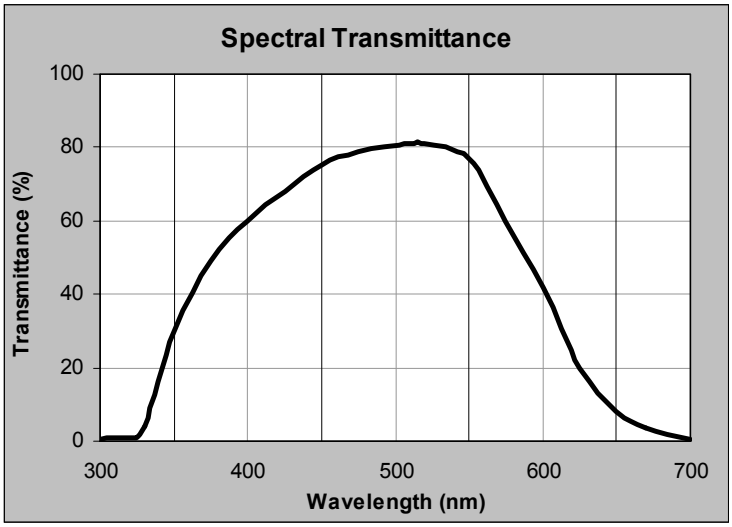
SPECIFICATIONS

Part Number	Total Area (mm²)	Active Area (in)	Responsivity Min. (A/W)	Shunt Resistance Min. (MΩ)	Dark Current[1] Typ. (nA)	Breakdown Voltage[1] Typ. (V)	Capacitance[2] Typ. (pF)	NEP Typ. (W/√Hz)	Response Time[5] Typ. (ns)
SD 100-33-22-223	5.1	0.100 (dia).	0.2 @ 550nm	300	6.4 @ 5V	50	87 @ 0V	$4.2x10^{-12}$ (3)	15 @ 5V
SD 100-34-23-123	5.1	0.100 (dia).	0.01 @ 254nm	650	6.0 @ 5V	5	100 @ 0V	$6.0x10^{-12}$ (3)	45 @ 0V
SD 290-32-31-243	42.6	0.300 x 0.220	0.5 @ 900nm	N/A	320 @ 24V	75	32 @ 24V	$7.0x10^{-13}$ (4)	30 @ 24V
SD 170-31-22-223	14.8	0.152 x 0.152	0.2 @ 550nm	500	18 @ 10V	50	250 @ 0V	$3.5x10^{-13}$ (3)	90 @ 0V

* All values at 23°C

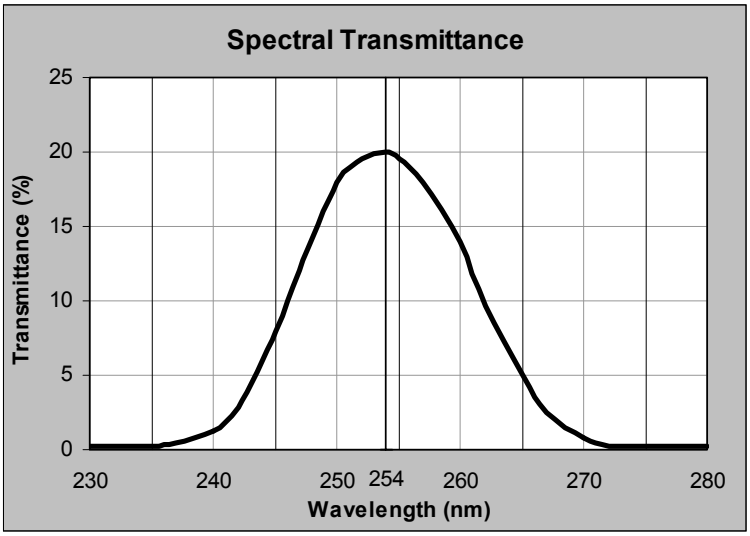
1. Typical values listed. Minimum value shall be 50% of typical.
2. Typical values listed. Maximum value shall be 20% higher than the typical.
3. Test conditions are peak wavelength and V_B = 10mV.
4. Test conditions are V_B = 24mV, and 900 nm.
5. Response Time (transition time between 10% and 90% of the output signal amplitude) measured at 670 nm with a 50Ω load. Shorter wavelengths will result in faster rise and fall times.
6. Storage and Operating Temperature Range for all detectors is -40°C to 110°C, except for the SD 290-32-31-243, which is - 20°C to 75°C.

SD 100-33-22-223



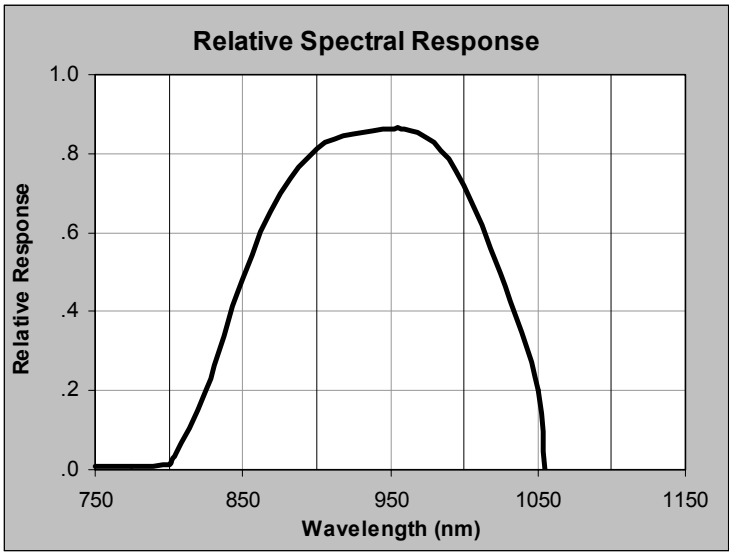
Average blocking 200-300nm, 700-1100nm < 1%

SD 100-34-23-123



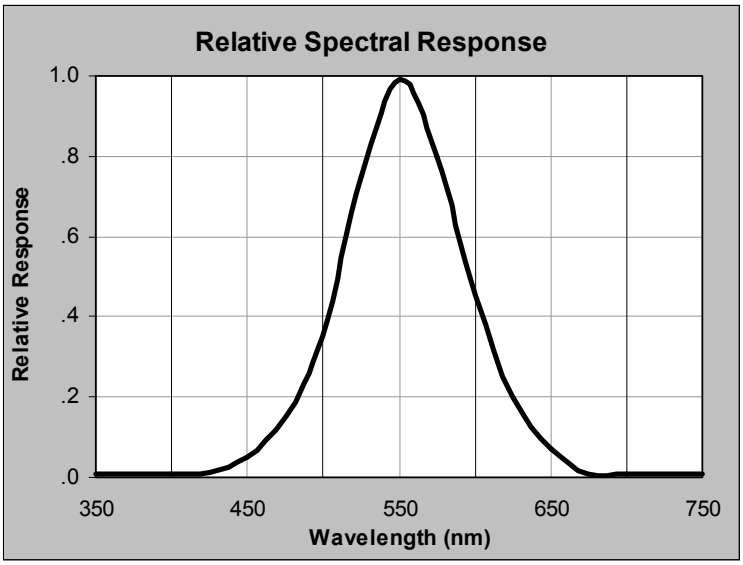
Average blocking 310-1100nm < 3x10-5

SD 290-32-31-243



Average blocking 300-700nm < 2%

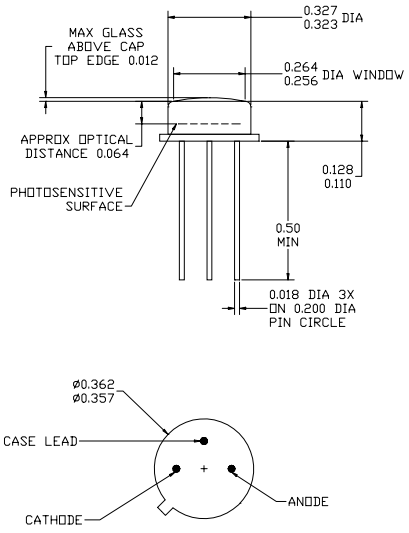
SD 170-32-31-243



Average blocking 200-390nm, 720-1100nm < 1%

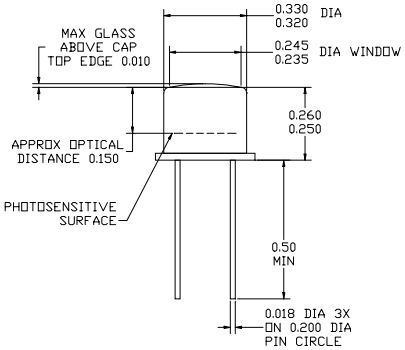
Dimensional Outlines

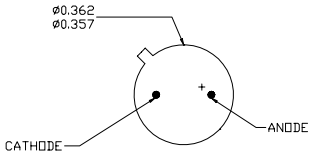
SD 100-33-22-223



BOTTOM VIEW

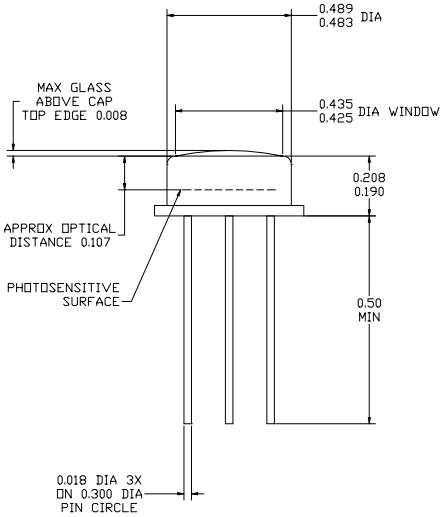
SD 100-34-23-123

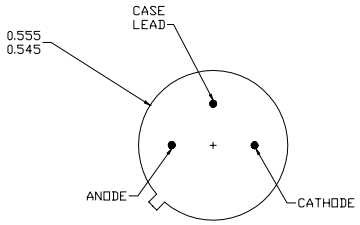




BOTTOM VIEW

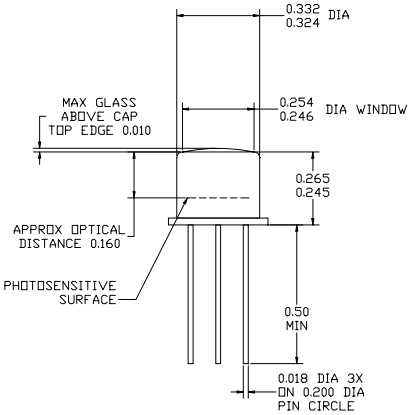
SD 290-32-31-243

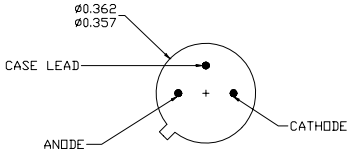




BOTTOM VIEW

SD 170-31-22-223





BOTTOM VIEW