

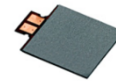
Laser Power Detector

FEATURES

- Highly sensitive thermal detectors
- 100 μ W to 5 W power range
- Sensitive to all wavelengths from UV to MIR
- Compact design
- Linear power response
- Attractive OEM pricing



gRAY - B01-SC



gRAY - B05-SC

Product Name	gRAYB01-SC	gRAYB05-SC
Article Number	A-044392	A-044580
Detector Type	thermal absorber	thermal absorber
Spectral Range [μ m]	0.19 – 15	0.19 – 15
Sensing Area (a x b) [mm x mm]	4.4 x 4.4	10.0 x 10.0
Sensor Thickness (d) [mm]	0.5	0.5
Max. Power [W]	1 (additional cooling necessary by heat sink)	5 (additional cooling necessary by heat sink)
Noise Equivalent Power ^a [μ W]	10	10
Max. Average Power Density [kW/cm ²]	1.5	1.5
Min. Sensitivity ^b (Z) [mV/W]	70	70
Temperature Dependence of Z [%/°C]	0.125	0.125
Response Time (0-95%) [s]	0.7 ^b / 2.1	0.7 ^b / 2.1
Homogeneity ^c [%]	1	1
Linearity with Power [%]	0.5	0.5
Operating Temperature Range Min / Max [°C]	-50 / 150	-50 / 150
Cooling Method	conduction, convection	conduction, convection
Electrical Connection (Solder Pads)	Bottom side ^d	Bottom side ^d

^a Experimentally evaluated values under optimal steady state conditions.

^b Anticipated signal.

^c Position dependent signal for beam diameters smaller than 1.5 mm not specified.

^d Alternative contacting (e.g. flex prints) on request

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