

gRAY Thermal PSD (Position Detector)

PRELIMINARY FEATURES

- Position and absolute power sensing of laser beams
- Highly sensitive thermopile sensor
- Sensitive to all wavelengths from UV to MIR
- Wide power range from μW to W
- Tolerant to beam angle
- Compact and robust design for system integration



gRAY-B05-PC

Product Name	gRAY-B05-PC
Detector Type	thermoelectric
Spectral Range [μm]	0.19 - 15
Overall Detector Sensing Area (a x b) [mm x mm]	18 x 18
Sensor Thickness (d) [mm]	0.6
Spatial resolution [μm]	< 100
Max. Power [W]	5
Noise Equivalent Power ^a [μW]	10
Max. Average Power Density [W/cm^2]	500
Min. Sensitivity of each quadrant (Z) ^b [mV/W]	70
Temperature Dependence of Z [%/°C]	0.125
Response Time (0-95%) [s]	0.8 ^c / 2.8
Operating Temperature Range Min/Max [°C]	-50 / 150
Cooling Method	Conduction / Convection
Linearity with Power [$\pm\%$]	0.5

^a Experimentally evaluated values under optimal steady state conditions.

^b Position sensors are delivered without calibration.

^c Anticipated signal.

Datasheet V2.0, © Copyright greenTEG AG, 2014 All Rights Reserved

