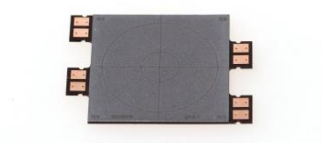
gRAY

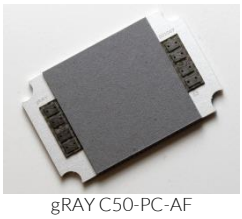
Thermal PSD (Position Sensitive Devices)

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



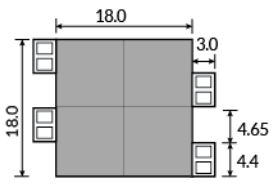
gRAY B05-PC

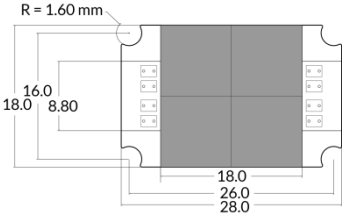


gRAY C50-PC-AF

Product Name	gRAY B05-PC	gRAY C50-PC-AF
Article Number	A-044632	A-072147
Detector Type	Thermopile	Thermopile
Spectral Range [µm]	0.19 - 15	0.19 - 15
Overall Detector Sensing Area (a x b) [mm x mm]	18 x 18	18 x 18
Sensor Thickness (d) [mm]	0.6	1.6
Spatial resolution [µm]	30	50
Max. Power [W]	5	30
Noise Equivalent Power [a] [mW]	0.01	1
Min. Detectable Power [mW]	0.1	10
Max. Average Power Density [kW/cm^2]	1.5	1.5
Max. Energy Density [b] [J/ cm^2]	0.125 (1064 nm, 10 ns) 0.173 (266 nm, 4.8 ns)	0.125 (1064 nm, 10 ns) 0.173 (266 nm, 4.8 ns)
Min. Sensitivity of each quadrant (Z) [c] [mV/W]	80	0.5
Temperature Dependence of Z [%/°C]	0.125	0.175
Rise Time (0-95%) [s]	2.1	0.2
Linearity with Power [±%]	0.5	0.5
Operating Temperature Range Min/Max [°C]	10 / 80	10 / 80
Cooling Method	Conduction, convection	Conduction, convection (active)
Electrical Connection	Solder pads	Solder pads

[a] Experimentally evaluated values under optimal steady state conditions. Limited by noise of measurement device.
[b] Carried out by certified LIDT laboratory.
[c] Position sensors are delivered without calibration.





greenTEG AG
Technoparkstrasse 1
8005 Zürich, Switzerland
T: +41 44 632 04 20
F: +41 44 633 13 68
info@greenTEG.com
greenTEG.com