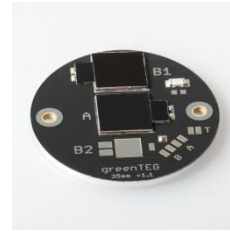


gRAY B05-MC

PCB-Mounted Laser Power Detector

FEATURES

- gRAY Laser Detector on a metal-core PCB (acts as heat sink), no thermal integration needed
- 10 μ W to 5 W power range
- Sensitive to all wavelengths from UV to MIR
- Thermal background compensation
- Optional: integrated NTC or platinum thermistor
- Simple, compact and robust mounting
- NIST/PTB traceable calibration



gRAY B05-MC

Product Name	gRAY B05-MC
Article Number	A-171341
Detector Type	thermal absorber
Spectral Range [μ m]	0.19 - 15
Board Diameter (d) [mm]	35
PCB Base Material	1.5mm alu-core PCB
Product Thickness (t) [mm]	2.5
Sensing Area (a x b) [mm x mm]	10.0 x 10.0
Max. Power [W]	5 (additional cooling necessary e.g. heat sink)
Noise Equivalent Power ^a [μ W]	10
Max. Average Power Density [kW/cm^2]	1.5
Min. Sensitivity ^b (Z) [mV/W]	70
Temperature Dependence of Z [%/°C]	0.125
Integrated NTC or platinum Thermistor	optional
Response Time (0-95%) [s]	0.5 ^c / 1.5
Operating Temperature Range Min / Max [°C]	-50 / 100
Cooling Method	conduction / convection
Homogeneity ^d [%]	1
Linearity with Power [%]	0.5
Electrical Connection	solder pads
Mounting Method	screws (2 x M2) and/or thermal glue gSKIN [®] MOUNT-1213 (A-018884)

^a Experimentally evaluated values under optimal steady state conditions.

^b For applications with highest precision requirements, greenTEG recommends an optical calibration once the gRAY sensor is integrated into the final system.

^c Anticipated.

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

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