



# Electro Optical Components, Inc.

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## gSKIN® MOD



PCB-mounted Radiation Sensor

Diameter: 35mm

Sensitivity: >70mV/W

### Features

- Radiation Sensor on a metal-core PCB (acts as heat sink), no thermal integration needed
- Absolute power sensing of lasers down to 10  $\mu$ W
- Simple, compact and robust mounting
- Sensitive to all wavelengths from UV to MIR
- Wide power range from  $\mu$ W to W
- Thermal background compensation
- Optional: integrated NTC or platinum thermistor
- Available with NIST/PTB traceable calibration

	gSKIN® MOD 1071R
Article Number	A-071341
Detector Type	thermal absorber
Spectral Range [ $\mu$ m]	0.19 - 15
Board Diameter (d) [mm]	35.0
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
Noise Equivalent Power <sup>a</sup> [ $\mu$ W]	7
Typical Power Resolution with gSKIN® DLOG <sup>b</sup> [ $\mu$ W]	9
Max. Average Power Density [W/cm <sup>2</sup> ]	500
Min. Sensitivity <sup>c</sup> (Z) [mV/W]	70
Temperature Dependence of Z [%/°C]	0.125
Integrated NTC or platinum Thermistor	optional for OEM applications
Response Time (0-95%) [s]	0.8 <sup>d</sup> / 2.8
Operating Temperature Range Min / Max [°C]	-50 / 150
Cooling Method	conduction, convection
Homogeneity <sup>e</sup> [ $\pm$ %]	1
Linearity with Power [ $\pm$ %]	0.5
Electrical Connection	solder pads
Mounting Method	screws (2 x M2) and/or thermal glue gSKIN® MOUNT-1213

<sup>a</sup> Experimentally evaluated values under optimal steady state conditions.

<sup>b</sup> Guaranteed minimum heat flux resolution using the gSKIN® DLOG-4219.

<sup>c</sup> For applications with highest precision requirements, greenTEG recommends an optical calibration once the gSKIN® sensor is integrated into the final system. NIST/PTB traceable calibration upon request.

<sup>d</sup> Anticipated signal.

<sup>e</sup> Position dependent signal change across sensing area for beam diameters down to 1.5mm.