



# Electro Optical Components, Inc.

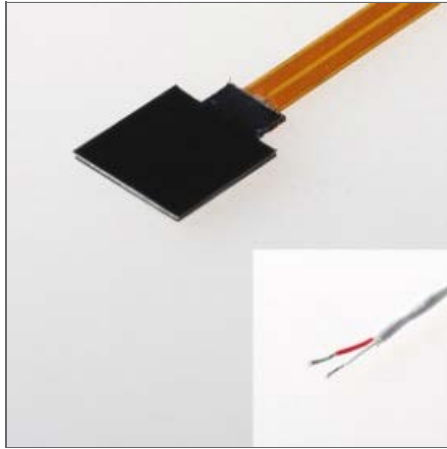
5464 Skylane Boulevard, Suite D, Santa Rosa, CA 95403

Toll Free: 855-EOC-6300

[www.eoc-inc.com](http://www.eoc-inc.com) | [info@eoc-inc.com](mailto:info@eoc-inc.com)



## gSKIN®-XP 46 9R



Radiation Sensor  
Size: 10.0mm x 10.0mm  
Sensitivity: >70mV/W

### Features

- Highly sensitive thermal detectors
- Flat sensitivity curve across broad spectral range up to 15  $\mu\text{m}$
- Ultra-low noise
- 100  $\mu\text{W}$  to 16 W power range
- Fast response time
- Compact design
- Homogeneous
- Linear power response
- Available with NIST/PTB traceable calibration

	gSKIN®-XP 46 9R
Article Number	A-044582
Detector Type	thermal absorber
Spectral Range [ $\mu\text{m}$ ]	0.19 - 15
Sensing Area (a x b) [mm x mm]	10.0 x 10.0
Sensor Thickness (d) [mm]	0.6
Max. Power [W]	5
Noise Equivalent Power <sup>a</sup> [ $\mu\text{W}$ ]	7
Typical Power Resolution with gSKIN® DLOG <sup>b</sup> [ $\mu\text{W}$ ]	9
Max. Average Power Density [ $\text{W}/\text{cm}^2$ ]	500
Min. Sensitivity <sup>c</sup> (Z) [mV/W]	70
Temperature Dependence of Z [%/°C]	0.125
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
Flexprint Length [cm]	5
Cable Length [cm] (Connector)	100 (no)

<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.