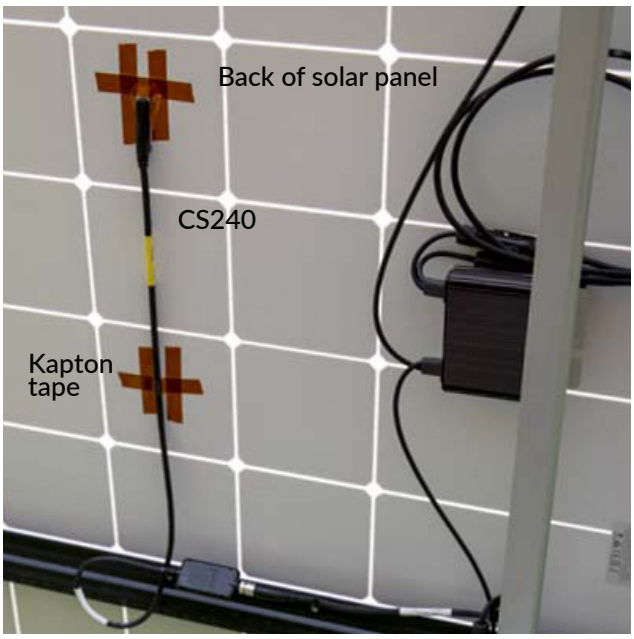
BACK-OF-PANEL TEMPERATURE SENSOR

CS240

Overview

The CS240 is a surface mountable PT1000 Class A platinum resistance thermometer (PRT) designed to measure back-of-panel temperature with the highest accuracy.



Features

The PRT is housed inside a rugged, self-adhesive aluminum disk designed to withstand harsh environments and promote heat transfer from panel surface to PRT. Kapton tape is required to fasten the CS240 to the back of a solar panel and to avoid cable strain relief.

Typical Applications

The CS240 attaches to the back of a solar panel for use in power performance modeling and simulation of solar energy operations. Back-of-panel temperature is critical for any evaluation of effective irradiance and power conversion.

Product Specifications

	CS240
Element Type	Precision 1000 Ω class A platinum sensing element
Tolerance	± (0.15 + 0.002t)
Temperature Coefficient	TCR = 3850 ppm/K
Long-Term Stability	Maximum R_0 drift 0.04 % (after 1000 h at 400 C)
Measuring Current	0.1 to 0.3 mA
Operating Temperature Range	-40 to 105 C
Disk Material	Anodized aluminum
Cable Jacket Material	Black semi-gloss PVC, UL VW-1 sunlight-resistant for outdoor use
Disk Diameter	25.4 mm
Overall Probe Length	63.5 mm
Overmolded Joint Dimensions	57.2 x 11.2 x 14.7 mm
Weight	90.7 g with 10.5 ft of cable
Warranty	4 years against defects in materials and workmanship

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