

Ω OMEGA®

SA2 -J, K, T, E

Molded Silicone Surface Thermocouple

INSTRUCTION
SHEET

M0503B/0617

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GENERAL DESCRIPTION

The OMEGA SA2 Surface Thermocouples are manufactured with a flexible molded silicone sensor. This sensor design utilizes a silicone based self adhesive backing usable at temperatures up to 200°C (392°F).

The SA2 sensors are manufactured in two styles. The SA2C for Curved surfaces and the SA2F for Flat surfaces. The sensors are manufactured with 24 WG Stranded thermocouple grade wire. The beaded thermocouple junction is attached to the inner surface of the self adhesive foil backing to enhance thermal transfer for faster response times.

OPERATING INSTRUCTIONS

1. Prepare the surface to be measured by cleaning it of oils and dirt. A general purpose solvent or alcohol will do. Doing this will allow for better surface adhesion.
2. Peel the protective tape from the underside of the polyimide film (see Figure 1). (Take care not to get finger oils on the silicone adhesive or mounting surfaces.)

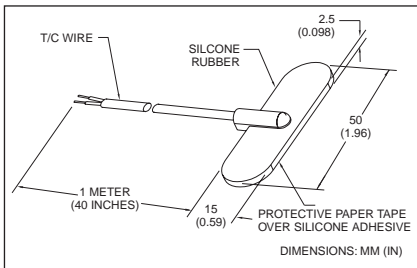


Figure 1. SA2C Pad

3. Simply press the T/C sensor onto the surface, and rub for maximum adhesion.
4. Connect the other end of the thermocouple wire to a temperature measuring device (red wire to negative terminal) and you are ready to begin taking temperature readings.

REUSING THESE PROBES

The adhesive backing on the SA2 sensors was designed for easy removal, but not for repetitive reapplication.

SPECIFICATIONS

T/C TYPES:
E

J, K, T, and

WIRE:

24AWG Stranded
w/PFA insulation.
1 m (40") Long
2 m (80") and 3 m
(120") lengths also
available.

TEMPERATURE RATINGS:

Pad/Adhesive Material Rating: Up to 200°C (392°F)

Thermocouple Wire: 200°C (392°F)

PAD MATERIALS: (See Figure 2)

Pad: Molded Silicone Over Aluminum Foil Backing

Adhesive Backing: Silicone Based PSA

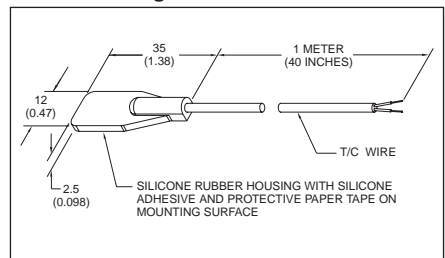
DIMENSIONS:

SA2C Pad: 16 x 57 x 2.0mm (0.59 x 1.97 x 0.080")

SA2F Pad: 35 x 13 x 2.0mm (1.38 x 0.47 x 0.080")

Wire Lengths Available: 1 m (40"), 2 m (80") and 3 m (120")

Figure 2. SA2F Pad





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If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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