GENERAL DESCRIPTION
The OMEGA® Self-Adhesive Thermocouples (T/C) are designed for fast surface temperature measurements up to 177°C (350°F). For easy installation (and removal), the probes have a self-adhesive backing; no epoxy or cement is required.

These SA-1 sensors are manufactured from 30 AWG PFA coated thermocouple wire. This “ribbon type” hot junction T/C is secured between a high temperature fiberglass cloth and a high temperature electrically insulating polyimide film. This type of T/C assembly provides good thermal conductivity and fast response, as well as excellent electrical insulating properties.

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 either surface.)
3. Simply press the T/C probe 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 SA-1 probes was designed for easy removal, but not for repetitive reapplication.

SPECIFICATIONS
T/C TYPES: J, K, T, E
WIRE: 30 AWG (0.010" dia), PFA coated, 1 m (40") long, 2 m (80") lengths also available
TEMPERATURE RATINGS:
Pad/Adhesive Material Rating: –60° to 177°C (–75° to 350°F)
Thermocouple Wire: Limited by the individual T/C rating (30 AWG type “T” thermocouple long term use is limited to 149°C [300°F])
PAD MATERIALS: (See Figure 2)
Upper Pad: Fiberglass Cloth
Lower Pad: High Performance Polyimide Film
Adhesive Backing: Silicone Polymer
DIMENSIONS:
Pad: 19 x 25 x 0.3 mm (0.75 x 1.00 x 0.012")
Wire Lengths Available: 1 m (40"), 2 m (80") and 3 m (120") (5 probes per pack)
The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. **WARNING:** These products are not designed for use in, and should not be used for, human applications.

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**WARRANTY/DISCLAIMER**

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA’S WARRANTY adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product.

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.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a “Basic Component” under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

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**RETURN REQUESTS / INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA’S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

**FOR WARRANTY RETURNS**, please have the following information available BEFORE contacting OMEGA:
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.

**FOR NON-WARRANTY REPAIRS**, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
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.

OMEGA’s policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering. OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

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