



# **Testing**

- Requalification includes the following tests referenced in MIL-PRF-23648
- · Short time overload
- Thermal shock
- Insulation resistance
- Resistance to soldering heat
- Low-temperature storage
- High-temperature storage
- Dissipation constant
- Thermal time constraint
- Terminal strength
- Moisture resistance
- High-temperature exposure
- Medium-impact shock
- Immersion

# 44900 SERIES THERMISTOR COMPONENTS

# **SPECIFICATIONS**

- 2252 Ohm to 30K Ohm Resistance @ 25°C
- Flight Qualified
- Interchangeability
- High Sensitivity
- Pressed Disk Key Characteristics

#### 44900 SERIES THERMISTORS

NASA Qualified epoxy encapsulated precision interchangeable NTC thermistors for use in extended space flight applications. All parts are fully flight tested and characterized. Line re-qualified yearly per MIL-PRF-23648 requirements as specified in GSFC S-311-P-18 document. All GSFC S-311-P-18 lead options wire options available.

# **FEATURES**

- Flight Qualified
- 2252 Ohm to 30K Ohm Resistance @ 25°C
- Interchangeability to ±0.1°C
- Excellent High Temperature Performance
- High Sensitivity
- Thermally Conductive Epoxy Coating Exhibits <0.66% TML,</li>
  <0.01% CVCM, 0.10% WVR when tested per ASTM E-595-90</li>

# **APPLICATIONS**

- Extended Space Applications
- Low and Mid Range Temperature Applications
- Tight Tolerance Instrumentation
- Applications Requiring Sensing Small Changes in Temperature
- · Applications with Outgassing Requirements

# PRODUCT DEFINITION

		Part Number	GSFC S-3118-P-18 Number	Basic MEAS Thermistor	Zero Power Resistance ohm at 25°C	Beta 0- 50°C (K)	Operating & Storage Temperature*	Color Code Body	End
±0.2°C Interchangeability Tolerance 0°C – 70°C		44901	-01S7R6	44004	2252	3891	-55 -+ 90°C	Black	Yellow
		44903	-03S7R6	44005	3000	3891	-55 -+ 90°C	Black	Green
		44905	-05S7R6	44007	5000	3891	-55 -+ 90°C	Black	Violet
		44907	-07S7R6	44006	10K	3574	-55 -+ 90°C	Black	Blue
		44909	-09S7R6	44008	30K	3810	-55 -+ 90°C	Black	Gray
±0.1°C Interchangeability Tolerance 0°C – 70°C		44902	02S7R6	44033	2252	3891	-55 -+ 70°C	Orange	Orange
		44904	-04S7R6	44030	3000	3891	-55 -+ 70°C	Orange	Black
		44906	-06S7R6	44034	5000	3891	-55 -+ 70°C	Orange	Yellow
		44908	-08S7R6	44031	10K	3574	-55 -+ 70°C	Orange	Brown
		44910	010S7R6	44032	30K	3810	-55 -+ 70°C	Orange	Red

<sup>\*</sup>Thermistors with  $\pm$  0.2°C interchangeability tolerance may have short-term operating temperature excursions to 150°C

Thermistors with ± 0.1°C interchangeability tolerance may have short-term operating temperature excursions to 100°C

### **NORTH AMERICA**

Measurement Specialties, Inc., a TE Connectivity Company 1711 139th Lane NW Andover, MN 55304 Tel: +1 763 689 4870 Fax: +1 763 689 5033 customercare.ando@te.com

### **EUROPE**

Measurement Specialties (Europe), Ltd., a TE Connectivity Company Ballybrit Business Park Galway Ireland Tel: +353-91-753238

Fax: +353-91-770789 Email: customercare.glwy@te.com

#### **ASIA**

Measurement Specialties (China), Ltd., a TE Connectivity Company No. 368 Wulian 1st Road Gongxing Town Shuangliu, Chengdu Sichuan, 610200 China

Tel: +86 (0) 28 8573 9088 Fax: +86 (0) 28 8573 9070 Email: customercare.chdu@te.com

### te.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties (MEAS), American Sensor Technologies (AST), TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set for Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific applications. Standard misuse

© 2016 TE Connectivity Ltd. family of companies All Rights Reserved.