



## 44900 SERIES

### Thermistor Components

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 S311-P18 document. All S311-P18 lead options wire options available.

#### Testing

Requalification includes the following tests referenced in MIL-PRF-23648

- Short time load
- 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

#### Features

- Flight Qualified
- 2252 Ohm to 30K Ohm Resistance @ 25°C
- Interchangeability to  $\pm 0.1^{\circ}\text{C}$
- High Sensitivity
- Thermally Conductive Epoxy Coating Exhibits  $<0.66\%$  TML,  $<0.01\%$  CVCM, 0.10% WVR when tested per ASTM E-595-90
- Pressed Disk Ceramic Characteristics
- Thermally Conductive Epoxy Coating
- RoHS Compliance

#### Applications

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

## Performance Specifications

|                                                         | Model Number | Ordering Part Number | GSFC S311-P18 Number | Basic MEAS Thermistor | Zero Power Resistance ohm at 25°C | Beta 0- 50°C (K) | Operating & Storage Temperature* | Color Code Body | End    |
|---------------------------------------------------------|--------------|----------------------|----------------------|-----------------------|-----------------------------------|------------------|----------------------------------|-----------------|--------|
| <b>±0.2°C Interchangeability Tolerance<br/>0 – 70°C</b> | 44901        | 095800               | -01S7R6              | 44004                 | 2252                              | 3891             | -55-+90°C                        | Black           | Yellow |
|                                                         | 44903        | 095802               | -03S7R6              | 44005                 | 3000                              | 3891             | -55-+90°C                        | Black           | Green  |
|                                                         | 44905        | 095804               | -05S7R6              | 44007                 | 5000                              | 3891             | -55-+90°C                        | Black           | Violet |
|                                                         | 44907        | 095806               | -07S7R6              | 44006                 | 10K                               | 3574             | -55-+90°C                        | Black           | Blue   |
|                                                         | 44909        | 095808               | -09S7R6              | 44008                 | 30K                               | 3810             | -55-+90°C                        | Black           | Gray   |
| <b>±0.1°C Interchangeability Tolerance<br/>0 – 70°C</b> | 44902        | 095801               | 02S7R6               | 44033                 | 2252                              | 3891             | -55-+70°C                        | Orange          | Orange |
|                                                         | 44904        | 095803               | -04S7R6              | 44030                 | 3000                              | 3891             | -55-+70°C                        | Orange          | Black  |
|                                                         | 44906        | 095805               | -06S7R6              | 44034                 | 5000                              | 3891             | -55-+70°C                        | Orange          | Yellow |
|                                                         | 44908        | 095807               | -08S7R6              | 44031                 | 10K                               | 3574             | -55-+70°C                        | Orange          | Brown  |
|                                                         | 44910        | 095809               | 010S7R6              | 44032                 | 30K                               | 3810             | -55-+70°C                        | Orange          | Red    |

\* Thermistors with ±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  
Tel: 800-522-6752  
[customercare.ando@te.com](mailto:customercare.ando@te.com)

### EUROPE

Measurement Specialties (Europe), Ltd.,  
a TE Connectivity Company  
Tel: 800-440-5100  
[customercare.tlse@te.com](mailto:customercare.tlse@te.com)

### ASIA

Measurement Specialties (China), Ltd.,  
a TE Connectivity Company  
Tel: 0400-820-6015  
[customercare.chdu@te.com](mailto:customercare.chdu@te.com)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[SP44907X-30](#)