



MODEL 44908

GSFC Space Qualified Thermistor

- Fully Qualified to GSFC S311-P18-08S7R6 Specification for Flight Use
- 10,000 ohm Resistance @ 25°C
- Interchangeable $\pm 0.1^{\circ}\text{C}$, 0°C to 70°C
- Pressed Disk Ceramic Sensor
- High sensitivity
- Thermally conductive epoxy coating that meet Outgassing Requirements
- 32 AWG, 3" (7.6 cm) long Solder plated copper leads
- Serialized and Color Coded for Identification

FEATURES

- Flight Qualified
- 10,000 ohm Resistance @ 25°C
- Interchangeability
- High Sensitivity
- Thermally Conductive Epoxy Coating
Exhibits <0.66% TML, <0.01% CVCM, 0.10% WVR when tested per ASTM E-595-90

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. Resistance (Type 08) available in other lead and resistance configurations per S311-P18.

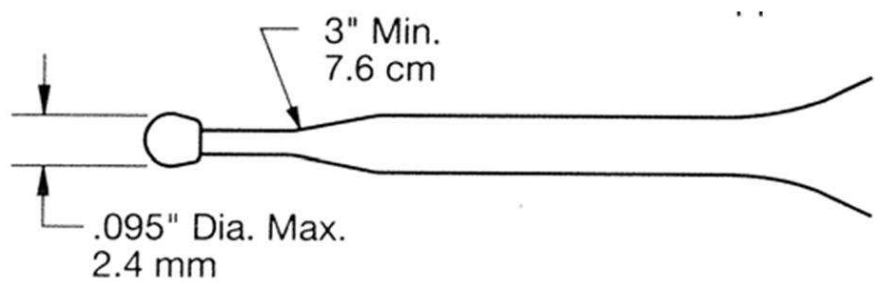
APPLICATIONS

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

PERFORMANCE SPECS

Parameter	Units	Value
Resistance @ 25°C	Ohms	10,000
Tolerance 0°C to 70°C	°C	± 0.1
Beta Value 25/85	K	3694
Tolerance on Beta Value	%	0.4
Time response in air	Seconds	< 10
Dissipation Constant in air	mW/°C	1
Insulation Resistance (Min. of 100 Mohms for 1 sec.)	Volts	500

MECHANICAL DETAILS



TYPICAL PERFORMANCE CURVES (RESISTANCE OF INDIVIDUAL THERMISTORS)

Temp °C	K-Ohms	Temp °C	K-Ohms	Temp °C	K-Ohms	Temp °C	K-Ohms
-55	607.8	-15	61.02	25	10.00	65	2.339
-54	569.6	-14	58.01	26	9.605	66	2.264
-53	534.1	-13	55.17	27	9.227	67	2.191
-52	501.0	-12	52.48	28	8.867	68	2.122
-51	470.1	-11	49.94	29	8.523	69	2.055
-50	441.3	-10	47.54	30	8.194	70	1.990
-49	414.5	-9	45.27	31	7.880		
-48	389.4	-8	43.11	32	7.579		
-47	366.0	-7	41.07	33	7.291		
-46	344.1	-6	39.14	34	7.016		
-45	323.7	-5	37.31	35	6.752		
-44	304.6	-4	35.57	36	6.500		
-43	286.7	-3	33.93	37	6.258		
-42	270.0	-2	32.37	38	6.026		
-41	254.4	-1	30.89	39	5.805		
-40	239.8	0	29.49	40	5.592		
-39	226.0	1	28.15	41	5.389		
-38	213.2	2	26.89	42	5.193		
-37	201.1	3	25.69	43	5.006		
-36	189.8	4	24.55	44	4.827		
-35	179.2	5	23.46	45	4.655		
-34	169.3	6	22.43	46	4.489		
-33	160.0	7	21.45	47	4.331		
-32	151.2	8	20.52	48	4.179		
-31	143.00	9	19.63	49	4.033		
-30	135.20	10	18.790	50	3.893		
-29	127.90	11	17.980	51	3.758		
-28	121.10	12	17.220	52	3.629		
-27	114.60	13	16.490	53	3.504		
-26	108.60	14	15.790	54	3.385		
-25	102.90	15	15.130	55	3.270		
-24	97.49	16	14.500	56	3.160		
-23	92.43	17	13.900	57	3.054		
-22	87.66	18	13.330	58	2.952		
-21	83.16	19	12.790	59	2.854		
-20	78.91	20	12.260	60	2.760		
-19	74.91	21	11.770	61	2.669		
-18	71.13	22	11.290	62	2.582		
-17	67.57	23	10.840	63	2.497		
-16	64.20	24	10.410	64	2.417		

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ORDERING INFORMATION

Part Number	Description	Ω @25°C
095807	44908 THERM GSFC 311P18-08S7R6	10,000
SP44908X-xx	44908X GSFC 311P18-08, Various Lead lengths and Types	10,000

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