Surface Sensor for High Rel & Aerospace

- **ESCC Qualified.**
- **Has become industry standard.**
- **Excellent stability.**
- **Flight heritage.**
- **Flat surface for ease of mounting.**
- **Robust construction.**
- **Data Report including test data.**
- **Non ITAR restrictive.**
- **Approved by Prime Contractors**
- **ESCC Detail Specification No. 4006014.**
- **ESCC Part No. 400601408**

DESCRIPTION

Matched Glass Coated NTC Thermistor Beads mounted on aluminum housing and encapsulated in Stycast 2850FT epoxy. Wire connection is by 26AWG stranded / insulated leads. Lead wire is in accordance with ESCC Detail Specification no. 3901/012 variant 03.
Note: Lead Wire not to be cut to less than 50mm from Thermistor head.

FEATURES

ESCC qualified.
ESCC Detail Specification No. 4006014
ESCC Part No. 400601408.
Flat aluminum housing.
Radiation cross linked modified fluoropolymer Insulation.
Operating temperature range: -60℃ to + 160℃.

APPLICATIONS

Satellite electric motors.
Monitoring of gearboxes in satellites.
Temperature compensation.
Battery power packs.
Vision systems.
Monitoring of actuators.
Panel temperature measurement

PERFORMANCE SPECS

Parameter	Unit	Value
Zero power resistance@25℃	Ω	15,000
Tolerance @ -60℃	%	± 10.0
Tolerance @ -40℃	%	± 6.3
Tolerance from 0℃ to +100℃	%	± 1.0
Tolerance @ + 125℃	%	± 2.0
Tolerance @ + 140℃	%	± 3.0
Tolerance @ + 160℃	%	± 4.0
Beta value 25/85	K	3695
Resistance 0/70 slope	---	14.76
Operating range	℃	-60℃ to +160℃
Storage temperature	℃	-60℃ to +160℃
Power dissipation	mW	2 max
Thermal Time Constant	sec	25 max
Weight	g	2.3 max

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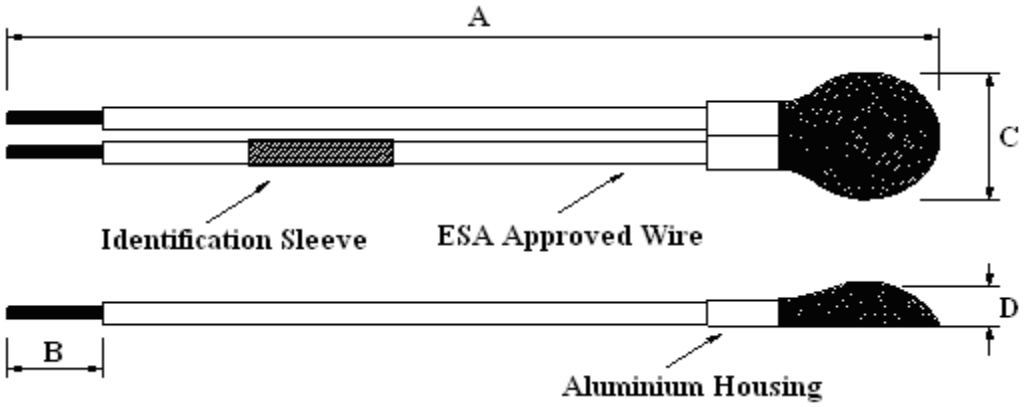
MECHANICAL DETAILS



DIMENSIONS			
A	**B**	**C**	**D**
381 ± 25mm	**6.5 ± 1mm**	**6.6 mm maximum**	**2.4mm maximum**

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-60	1,342,000
-55	957,000
-50	690,000
-45	503,700
-40	371,300
-35	276,200
-30	207,500
-25	157,200
-20	120,100
-15	92,600
-10	71,940
-5	56,310
0	44,420
2	40,490
4	36,930
6	33,740
8	30,840
10	28,230
12	25,860
14	23,720
16	21,780
18	20,010

Temp. °C	Ohms
20	18,410
22	16,950
24	15,620
25	15,000
26	14,410
28	13,310
30	12,300
32	11,370
34	10,530
36	9,756
38	9,047
40	8,397
42	7,800
44	7,253
46	6,747
48	6,282
50	5,855
52	5,460
54	5,096
56	4,758
58	4,448
60	4,160

Temp. °C	Ohms
62	3,894
64	3,647
66	3,419
68	3,206
70	3,009
72	2,826
74	2,657
76	2,498
78	2,351
80	2,213
82	2,085
84	1,965
86	1,853
88	1,749
90	1,652
92	1,560
94	1,475
96	1,395
98	1,320
100	1,250
102	1,185
104	1,123

Temp. °C	Ohms
106	1,065
108	1,011
110	959.5
112	911.3
114	866.0
116	823.3
118	783.2
120	745.3
122	709.7
124	675.9
126	644.3
128	614.3
130	585.9
132	559.0
134	533.8
136	509.9
138	487.0
140	465.5
145	416.7
150	373.6
160	302.4

ORDERING INFORMATION

Part Number	Description	Res. at 25°C	ESCC No.
G15K4D489	Surface probe, Hi-rel.	15,000 Ohms	400601408

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