

30K6A1W Series III & IV Thermistor



- Thermally conductive epoxy coating
- Choice of 30 AWG or 28 AWG tin plated copper leads
- Available in custom probe assemblies
- Available in custom tolerances
- RoHS Compliant

DESCRIPTION

The BetaCURVE Chip is Soldered to Tin Plated Copper Leads and Encapsulated in Stycast Epoxy Resin

FEATURES

- Interchangeability
- Proven Stability and Reliability
- Rapid time response
- Alloy lead wires for reduced thermal conductivity ("stem effect").
- Thermally Conductive Epoxy Coating
- Temperature range -40 °C to +125°C

APPLICATIONS

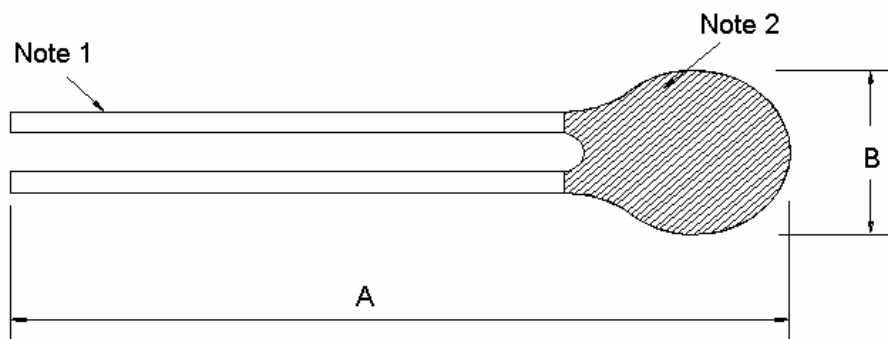
- Temperature sensing, control and compensation
- Tight Tolerance Instrumentation
- Assembly into probes for a wide variety of applications
- General Instrumentation applications

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	30,000
30K6A1W2 Resistance tolerance from 0°C to +70°C	°C	0.2
30K6A1W3 Resistance tolerance from 0°C to +70°C	°C	0.2
Alpha Value @ 25°C	%/°C	4.68
Beta Value 25/85	K	4261
Tolerance on Beta Value 25/85	%	0.5
Time response in Liquids	Seconds	<1.5
30K6A1W2 Dissipation Constant in still air	mW/°C	2
30K6A1W3 Dissipation Constant in still air	mW/°C	3

30K6A1W Series III & IV Thermistor

MECHANICAL DETAILS



	30K6A1W2		30K6A1W3	
	A	B	A	B
	46 ± 5mm	2.4mm Max	46 ± 5mm	2.8mm Max
Note 1	30 AWG Tin Plated Copper Leads		28 AWG Tin Plated Copper Leads	
Note 2	Green Stycast 2850ft Epoxy		Green Stycast 2850ft Epoxy	

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
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-40	1219114
-39	1137677
-38	1062161
-37	992104
-36	927079
-35	866698
-34	810604
-33	758469
-32	709991
-31	664894
-30	622924
-29	583847
-28	547448
-27	513528
-26	481906
-25	452413
-24	424895
-23	399208
-22	375221
-21	352813

Temp. °C	Ohms
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-20	331871
-19	312291
-18	293977
-17	276841
-16	260801
-15	245781
-14	231711
-13	218526
-12	206164
-11	194572
-10	183696
-9	173489
-8	163905
-7	154905
-6	146449
-5	138501
-4	131028
-3	124000
-2	117388
-1	111164

Temp. °C	Ohms
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0	105305
1	99787
2	94588
3	89688
4	85069
5	80712
6	76603
7	72725
8	69064
9	65608
10	62343
11	59258
12	56342
13	53585
14	50978
15	48512
16	46178
17	43969
18	41877
19	39896

Temp. °C	Ohms
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20	38019
21	36240
22	34554
23	32955
24	31439
25	30000
26	28635
27	27339
28	26108
29	24939
30	23828
31	22773
32	21770
33	20816
34	19909
35	19047
36	18225
37	17444
38	16700
39	15992

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40	15317	62	6276	84	2832	106	1387
41	14674	63	6041	85	2737	107	1345
42	14062	64	5816	86	2645	108	1305
43	13478	65	5601	87	2557	109	1266
44	12921	66	5394	88	2473	110	1228
45	12390	67	5196	89	2392	111	1192
46	11884	68	5007	90	2313	112	1156
47	11400	69	4825	91	2238	113	1123
48	10939	70	4651	92	2165	114	1090
49	10499	71	4483	93	2095	115	1058
50	10079	72	4323	94	2028	116	1027
51	9678	73	4169	95	1963	117	998
52	9294	74	4022	96	1901	118	969
53	8928	75	3880	97	1841	119	941
54	8578	76	3744	98	1783	120	915
55	8244	77	3613	99	1727	121	889
56	7924	78	3488	100	1673	122	864
57	7618	79	3367	101	1621	123	839
58	7325	80	3251	102	1571	124	816
59	7046	81	3140	103	1522	125	793
60	6778	82	3033	104	1476		
61	6521	83	2930	105	1431		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
30K6A1W2	Series III Thermistor	30,000	1,000*
30K6A1W3	Series IV Thermistor	30,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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