



5K3A1I SERIES II THERMISTOR

SPECIFICATIONS

- Thermally conductive epoxy coating
- Ø 2.4 mm Maximum Diameter
- 30 AWG Solid Silver Plated Copper Leads with White PTFE Insulation
- Choice of 4 temperature tolerance classifications
- RoHS Compliant

FEATURES

- Interchangeability
- Proven Stability and Reliability
- Rapid time response
- PTFE Insulated lead Wires
- Thermally Conductive Epoxy Coating
- Temperature range -40 °C to +125°C

The BetaCURVE Chip is Soldered to 30 AWG Solid Silver Plated Copper Leads with White PTFE Insulation. Device is Encapsulated in Stycast Epoxy Resin.

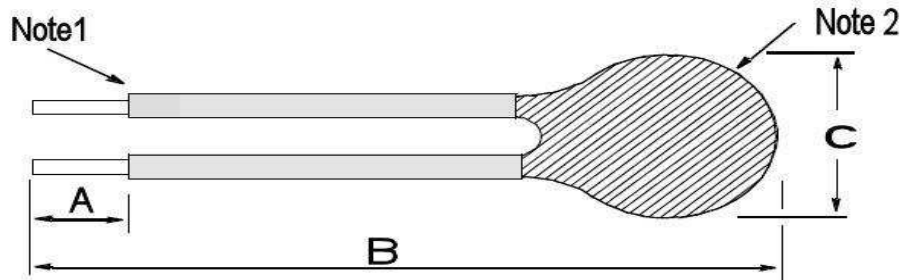
APPLICATIONS

- 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	5,000
5K3A1IA Resistance tolerance from 0°C to +70°C	°C	± 0.1
5K3A1IB Resistance tolerance from 0°C to +70°C	°C	± 0.2
5K3A1IC Resistance tolerance from 0°C to +70°C	°C	± 0.5
5K3A1ID Resistance tolerance from 0°C to +70°C	°C	± 1.0
Alpha Value @ 25°C	%/°C	4.39
Beta Value 25/85	K	3976
Tolerance on Beta Value 25/85	%	± 0.5
Time response in Liquids	Seconds	<1
Dissipation Constant in still air	mW/°C	0.85

MECHANICAL DETAILS



	Dimensions		
	A	B	C
	10 ± 2mm	76 ± 2mm	2.4mm Max
Note 1	30AWG Solid Silver Plated Copper Leads with White PTFE Insulation		
Note 2	Orange Stycast 2850ft Epoxy		

RESISTANCE V TEMPERATURE TABLE

Temp °C	Ohms	Temp °C	Ohms	Temp °C	Ohms	Temp °C	Ohms
-40	167862	2	14750	44	2271	86	519
-39	157111	3	14027	45	2183	87	503
-38	147117	4	13344	46	2100	88	487
-37	137820	5	12698	47	2020	89	472
-36	129169	6	12086	48	1944	90	458
-35	121114	7	11508	49	1870	91	444
-34	113611	8	10961	50	1800	92	431
-33	106620	9	10443	51	1733	93	418
-32	100102	10	9952	52	1669	94	406
-31	94022	11	9487	53	1608	95	394
-30	88349	12	9046	54	1549	96	382
-29	83054	13	8629	55	1493	97	371
-28	78107	14	8233	56	1438	98	360
-27	73486	15	7857	57	1387	99	349
-26	69166	16	7501	58	1337	100	339
-25	65127	17	7162	59	1289	101	330
-24	61348	18	6841	60	1244	102	320
-23	57811	19	6536	61	1200	103	311
-22	54499	20	6247	62	1158	104	302
-21	51397	21	5972	63	1117	105	294
-20	48490	22	5710	64	1078	106	285
-19	45765	23	5461	65	1041	107	277
-18	43210	24	5225	66	1005	108	270
-17	40812	25	5000	67	971	109	262
-16	38562	26	4786	68	938	110	255
-15	36450	27	4582	69	906	111	248
-14	34465	28	4388	70	876	112	241
-13	32601	29	4204	71	847	113	235
-12	30848	30	4028	72	818	114	228
-11	29200	31	3860	73	791	115	222
-10	27649	32	3701	74	765	116	216
-9	26191	33	3549	75	740	117	211
-8	24817	34	3403	76	716	118	205
-7	23524	35	3265	77	693	119	200
-6	22306	36	3133	78	670	120	194
-5	21158	37	3007	79	649	121	189
-4	20075	38	2887	80	628	122	184
-3	19055	39	2772	81	608	123	180
-2	18092	40	2662	82	589	124	175
-1	17183	41	2558	83	570	125	170
0	16325	42	2458	84	553		
1	15515	43	2362	85	535		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
5K3A1IA	Series II Thermistor	5,000	1,000*
5K3A1IB	Series II Thermistor	5,000	1,000*
5K3A1IC	Series II Thermistor	5,000	1,000*
5K3A1ID	Series II Thermistor	5,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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
customer care.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: customer care.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: customer care.chdu@te.com

te.com/sensorsolutions

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