



GA50K6A1 SERIES I THERMISTORS

Thermally Conductive Epoxy Coating

Ø 2.4 mm Maximum Diameter

32 AWG Alloy 180 Leads

Four Temperature Tolerance Classifications Available
RoHS Compliant

Features

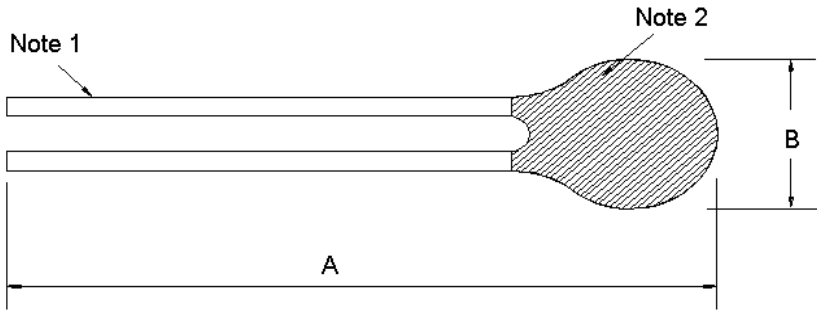
- Interchangeability
- Proven stability and reliability
- Rapid time response
- Alloy lead wires for reduced thermal conductivity ("stem effect")
- Thermally conductive epoxy coating
- Temperature range -40°C to +125°C
- Custom probe assemblies available

Applications

- Temperature sensing, control and compensation
- Tight tolerance instrumentation
- General instrumentation applications

BetaCURVE series I thermistors are small epoxy coated devices with solid tin-plated lead wires. The series I offers a choice of precision temperature tolerance classifications for a wide variety of customer applications, such as temperature measurements, temperature indication, temperature control, and thermal compensation.

Mechanical Details



Dimensions

A	B
76 ±2 mm	2.4 mm max.

Note 1: 32 AWG Solid Alloy 180 Leads
Note 2: Blue Stycast 2850ft Epoxy

Performance Specs

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	50,000
GA50K6A1A Resistance Tolerance from 0°C to +70°C	°C	±0.1
GA50K6A1B Resistance Tolerance from 0°C to +70°C	°C	±0.2
GA50K6A1C Resistance Tolerance from 0°C to +70°C	°C	±0.5
GA50K6A1D Resistance Tolerance from 0°C to +70°C	°C	±1.0
Alpha Value at +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
Dissipation Constant in Still Air	mW/°C	0.75

Resistance V Temperature Table

Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms
-40	2033476	2	157645	44	21536	86	4408
-39	1897553	3	149478	45	20651	87	4262
-38	1771522	4	141779	46	19807	88	4121
-37	1654608	5	134519	47	19001	89	3985
-36	1546100	6	127670	48	18233	90	3855
-35	1445347	7	121206	49	17499	91	3729
-34	1351752	8	115105	50	16799	92	3608
-33	1264768	9	109344	51	16130	93	3492
-32	1183890	10	103902	52	15491	94	3379
-31	1108657	11	98761	53	14881	95	3271
-30	1038644	12	93901	54	14297	96	3167
-29	973460	13	89307	55	13740	97	3067
-28	912745	14	84962	56	13207	98	2970
-27	856170	15	80852	57	12697	99	2877
-26	803428	16	76962	58	12209	100	2787
-25	754240	17	73280	59	11743	101	2700
-24	708347	18	69794	60	11297	102	2617
-23	665510	19	66492	61	10869	103	2536
-22	625510	20	63364	62	10460	104	2459
-21	588143	21	60400	63	10069	105	2384
-20	553222	22	57590	64	9694	106	2311
-19	520574	23	54925	65	9335	107	2241
-18	490038	24	52398	66	8990	108	2174
-17	461467	25	50000	67	8661	109	2109
-16	434724	26	47724	68	8345	110	2046
-15	409682	27	45564	69	8041	111	1985
-14	386224	28	43513	70	7751	112	1927
-13	364242	29	41565	71	7472	113	1870
-12	343634	30	39715	72	7205	114	1815
-11	324308	31	37956	73	6948	115	1762
-10	306178	32	36284	74	6702	116	1711
-9	289162	33	34695	75	6466	117	1662
-8	273187	34	33183	76	6239	118	1614
-7	258184	35	31745	77	6022	119	1568
-6	244088	36	30376	78	5812	120	1523
-5	230839	37	29074	79	5612	121	1480
-4	218384	38	27834	80	5419	122	1438
-3	206669	39	26654	81	5233	123	1398
-2	195647	40	25529	82	5055	124	1359
-1	185274	41	24458	83	4884	125	1321
0	175508	42	23437	84	4719		
1	166310	43	22463	85	4561		

GA50K6A1

SERIES I THERMISTORS

Ordering Information

Part Number	Description	Ω @25°C	MOQ*
GA50K6A1A	Series I thermistor	50,000	1,000
GA50K6A1B	Series I thermistor	50,000	1,000
GA50K6A1C	Series I thermistor	50,000	1,000
GA50K6A1D	Series I thermistor	50,000	1,000

* For quantities less than MOQ (Minimum Order Quantity) contact Distribution

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