



GA30K5A1 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

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.

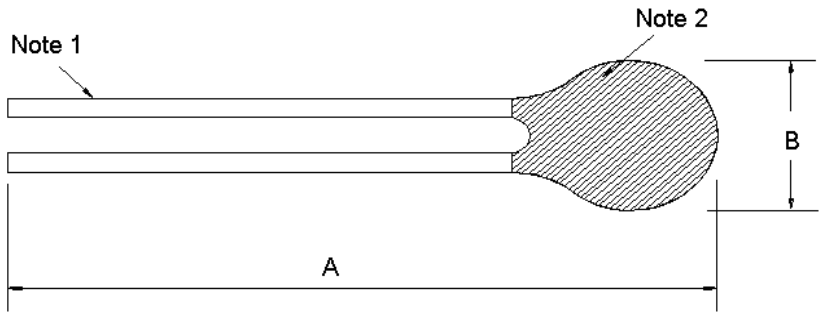
FEATURES

- 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

MECHANICAL DETAILS



DIMENSIONS

A	B
76 ±2 mm	2.4 mm max.

Note 1: 32 AWG Solid Alloy 180 Leads

Note 2: White Stycast 2850ft Epoxy

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	30,000
GA30K5A1A Resistance Tolerance from 0°C to +70°C	°C	±0.1
GA30K5A1B Resistance Tolerance from 0°C to +70°C	°C	±0.2
GA30K5A1C Resistance Tolerance from 0°C to +70°C	°C	±0.5
GA30K5A1D Resistance Tolerance from 0°C to +70°C	°C	±1.0
Alpha Value at +25°C	%/°C	4.30
Beta Value 25/85	K	3942
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	884198	2	86090	44	13799	86	3172
-39	830463	3	81996	45	13274	87	3074
-38	780301	4	78119	46	12772	88	2979
-37	733457	5	74445	47	12292	89	2888
-36	689693	6	70964	48	11831	90	2800
-35	648790	7	67663	49	11391	91	2715
-34	610546	8	64534	50	10968	92	2633
-33	574773	9	61565	51	10564	93	2554
-32	541299	10	58749	52	10176	94	2477
-31	509964	11	56076	53	9805	95	2403
-30	480620	12	53539	54	9449	96	2332
-29	453130	13	51129	55	9107	97	2263
-28	427367	14	48841	56	8780	98	2197
-27	403213	15	46667	57	8466	99	2132
-26	380560	16	44601	58	8164	100	2070
-25	359305	17	42637	59	7875	101	2010
-24	339357	18	40769	60	7597	102	1952
-23	320627	19	38993	61	7331	103	1896
-22	303035	20	37303	62	7075	104	1842
-21	286506	21	35696	63	6829	105	1789
-20	270969	22	34166	64	6593	106	1739
-19	256362	23	32709	65	6366	107	1690
-18	242622	24	31321	66	6148	108	1642
-17	229694	25	30000	67	5939	109	1596
-16	217526	26	28741	68	5738	110	1552
-15	206069	27	27541	69	5544	111	1509
-14	195278	28	26398	70	5358	112	1467
-13	185111	29	25307	71	5179	113	1427
-12	175529	30	24268	72	5007	114	1388
-11	166495	31	23276	73	4841	115	1350
-10	157975	32	22329	74	4682	116	1314
-9	149937	33	21426	75	4528	117	1278
-8	142352	34	20564	76	4381	118	1244
-7	135191	35	19741	77	4239	119	1211
-6	128429	36	18955	78	4102	120	1178
-5	122041	37	18204	79	3970	121	1147
-4	116006	38	17487	80	3843	122	1117
-3	110301	39	16801	81	3721	123	1087
-2	104907	40	16146	82	3603	124	1059
-1	99806	41	15519	83	3489	125	1031
0	94980	42	14920	84	3380		
1	90413	43	14347	85	3274		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ*
GA30K5A1A	Series I thermistor	30,000	1,000
GA30K5A1B	Series I thermistor	30,000	1,000
GA30K5A1C	Series I thermistor	30,000	1,000
GA30K5A1D	Series I thermistor	30,000	1,000

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

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