



GA10K3A1 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.

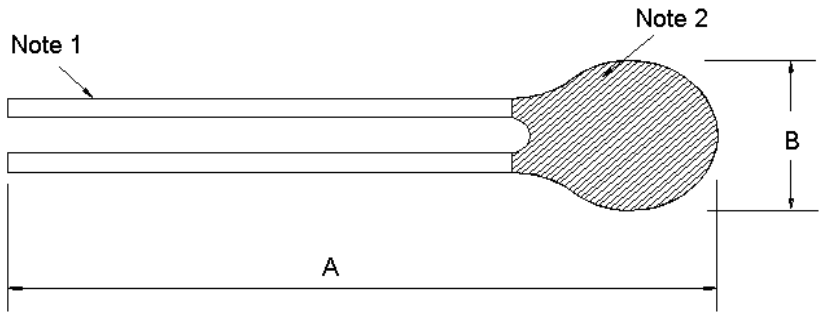
FEATURES

- 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: Yellow Stycast 2850ft Epoxy

PERFORMANCE SPECS

Parameters	Units	Value
Nominal Resistance at +25°C	Ohms	10,000
GA10K3A1A Resistance Tolerance from 0°C to +70°C	°C	±0.1
GA10K3A1B Resistance Tolerance from 0°C to +70°C	°C	±0.2
GA10K3A1C Resistance Tolerance from 0°C to +70°C	°C	±0.5
GA10K3A1D Resistance Tolerance from 0°C to +70°C	°C	±1.0
Alpha Value at +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	0.75

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms	Temp. °C	Ohms
-40	336098	2	29500	44	4542	86	1037
-39	314553	3	28054	45	4367	87	1005
-38	294524	4	26687	46	4200	88	974
-37	275897	5	25395	47	4040	89	945
-36	258563	6	24172	48	3887	90	916
-35	242427	7	23016	49	3741	91	888
-34	227398	8	21921	50	3601	92	862
-33	213394	9	20885	51	3467	93	836
-32	200339	10	19903	52	3339	94	811
-31	188163	11	18973	53	3216	95	787
-30	176803	12	18092	54	3098	96	764
-29	166198	13	17257	55	2985	97	741
-28	156294	14	16465	56	2877	98	720
-27	147042	15	15714	57	2773	99	699
-26	138393	16	15001	58	2674	100	678
-25	130306	17	14324	59	2579	101	659
-24	122741	18	13682	60	2487	102	640
-23	115661	19	13073	61	2399	103	622
-22	109032	20	12493	62	2315	104	604
-21	102824	21	11943	63	2234	105	587
-20	97006	22	11420	64	2157	106	571
-19	91553	23	10923	65	2082	107	555
-18	86439	24	10450	66	2011	108	539
-17	81641	25	10000	67	1942	109	524
-16	77138	26	9572	68	1876	110	510
-15	72911	27	9165	69	1813	111	496
-14	68940	28	8777	70	1752	112	482
-13	65209	29	8408	71	1693	113	469
-12	61703	30	8056	72	1637	114	457
-11	58405	31	7721	73	1582	115	444
-10	55304	32	7402	74	1530	116	432
-9	52385	33	7097	75	1480	117	421
-8	49638	34	6807	76	1432	118	410
-7	47050	35	6530	77	1385	119	399
-6	44613	36	6266	78	1341	120	388
-5	42317	37	6014	79	1298	121	378
-4	40151	38	5774	80	1256	122	368
-3	38110	39	5544	81	1216	123	359
-2	36184	40	5325	82	1178	124	350
-1	34366	41	5116	83	1141	125	341
0	32651	42	4916	84	1105		
1	31031	43	4724	85	1070		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ*
GA10K3A1A	Series I thermistor	10,000	1,000
GA10K3A1B	Series I thermistor	10,000	1,000
GA10K3A1C	Series I thermistor	10,000	1,000
GA10K3A1D	Series I thermistor	10,000	1,000

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

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