



GA30K6A1 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.

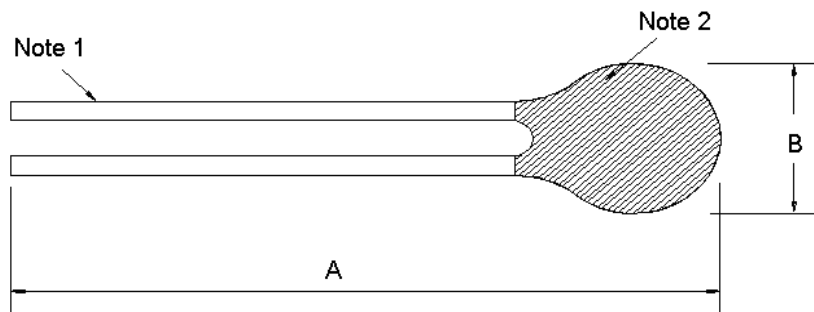
FEATURES

- 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: Green 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	4.68
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	1219114	2	94588	44	12921	86	2645
-39	1137677	3	89688	45	12390	87	2557
-38	1062161	4	85069	46	11884	88	2473
-37	992104	5	80712	47	11400	89	2392
-36	927079	6	76603	48	10939	90	2313
-35	866698	7	72725	49	10499	91	2238
-34	810604	8	69064	50	10079	92	2165
-33	758469	9	65608	51	9678	93	2095
-32	709991	10	62343	52	9294	94	2028
-31	664894	11	59258	53	8928	95	1963
-30	622924	12	56342	54	8578	96	1901
-29	583847	13	53585	55	8244	97	1841
-28	547448	14	50978	56	7924	98	1783
-27	513528	15	48512	57	7618	99	1727
-26	481906	16	46178	58	7325	100	1673
-25	452413	17	43969	59	7046	101	1621
-24	424895	18	41877	60	6778	102	1571
-23	399208	19	39896	61	6521	103	1522
-22	375221	20	38019	62	6276	104	1476
-21	352813	21	36240	63	6041	105	1431
-20	331871	22	34554	64	5816	106	1387
-19	312291	23	32955	65	5601	107	1345
-18	293977	24	31439	66	5394	108	1305
-17	276841	25	30000	67	5196	109	1266
-16	260801	26	28635	68	5007	110	1228
-15	245781	27	27339	69	4825	111	1192
-14	231711	28	26108	70	4651	112	1156
-13	218526	29	24939	71	4483	113	1123
-12	206164	30	23828	72	4323	114	1090
-11	194572	31	22773	73	4169	115	1058
-10	183696	32	21770	74	4022	116	1027
-9	173489	33	20816	75	3880	117	998
-8	163905	34	19909	76	3744	118	969
-7	154905	35	19047	77	3613	119	941
-6	146449	36	18225	78	3488	120	915
-5	138501	37	17444	79	3367	121	889
-4	131028	38	16700	80	3251	122	864
-3	124000	39	15992	81	3140	123	839
-2	117388	40	15317	82	3033	124	816
-1	111164	41	14674	83	2930	125	793
0	105305	42	14062	84	2832		
1	99787	43	13478	85	2737		

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ*
GA30K6A1A	Series I thermistor	30,000	1,000
GA30K6A1B	Series I thermistor	30,000	1,000
GA30K6A1C	Series I thermistor	30,000	1,000
GA30K6A1D	Series I thermistor	30,000	1,000

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

NORTH AMERICA
Tel +1 800 522 6752
customercare.ando@te.com

EUROPE
Tel +31 73 624 6999
customercare.glwy@te.com

ASIA
Tel +86 0400 820 6015
customercare.chdu@te.com

te.com/sensorsolutions

BetaCurve, TE Connectivity, TE, and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies. Other logos, products and/or company names referred to herein may be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2018 TE Connectivity Ltd. family of companies All Rights Reserved.