

1K7C Silver leadless chip



- Rapid Time response
- Surface Mount Capability
- Uniformly Sized for Pick & Place Assembly
- Square and Rectangular Configuration
- RoHS Compliant

DESCRIPTION

Silver terminated leadless NTC thermistor.

FEATURES

- Rapid Time Response (<1second in liquids)
- Supplied with $\pm 5\%$ and $\pm 10\%$ tolerance
- Higher precision tolerance available
- Surface Mount Capability
- Supplied in "gel" or waffle" packs
- Square or Rectangular Configurations
- Temperature range $-40\text{ }^{\circ}\text{C}$ to $+100\text{ }^{\circ}\text{C}$

APPLICATIONS

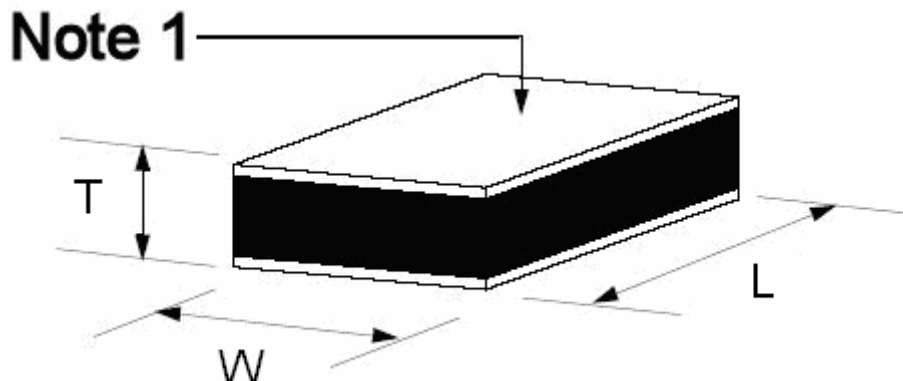
- Automotive temperature controls
- Surface mounting on hybrid circuits
- Temperature compensation of crystal oscillators
- Localized temperature sensing

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	1,000
1K7C3 Resistance tolerance +25°C	%	± 5
1K7C2 Resistance tolerance +25°C	%	± 10
Alpha Value @ 25°C	%/°C	- 3.87
Beta Value 25/85	K	3499
Time response in Liquids	Seconds	<1
Dissipation Constant in still air	mW/°C	1

1K7C Silver leadless chip

MECHANICAL DETAILS



	Dimensions					
	Millimeters			Inches		
	L	W	T	L	W	T
	1.067	1.067	0.381	0.042	0.042	0.015
Note 1	Silver Metalisation					

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	21,681.1
-39	20,464.9
-38	19,324.5
-37	18,254.6
-36	17,250.5
-35	16,307.9
-34	15,422.5
-33	14,590.6
-32	13,808.6
-31	13,073.4
-30	12,381.7
-29	11,730.9
-28	11,118.2
-27	10,541.2
-26	9,997.6
-25	9,485.3
-24	9,002.4
-23	8,546.9
-22	8,117.2

Temp. °C	Ohms
-21	7,711.7
-20	7,328.9
-19	6,967.3
-18	6,625.8
-17	6,303.0
-16	5,997.8
-15	5,709.2
-14	5,436.2
-13	5,177.9
-12	4,933.3
-11	4,701.8
-10	4,482.4
-9	4,274.6
-8	4,077.6
-7	3,890.9
-6	3,713.8
-5	3,545.8
-4	3,386.3
-3	3,234.9

Temp. °C	Ohms
-2	3,091.2
-1	2,954.7
0	2,825.0
1	2,701.7
2	2,584.6
3	2,473.1
4	2,367.1
5	2,266.3
6	2,170.3
7	2,078.9
8	1,991.9
9	1,909.1
10	1,830.1
11	1,754.9
12	1,683.1
13	1,614.7
14	1,549.5
15	1,487.2
16	1,427.9

Temp. °C	Ohms
17	1,371.2
18	1,317.0
19	1,265.4
20	1,216.0
21	1,168.8
22	1,123.7
23	1,080.6
24	1,039.4
25	1,000.0
26	962.3
27	926.2
28	891.7
29	858.6
30	827.0
31	796.7
32	767.6
33	739.8
34	713.2
35	687.6

1K7C Silver leadless chip

36	663.1
37	639.6
38	617.1
39	595.4
40	574.7
41	554.8
42	535.6
43	517.3
44	499.6
45	482.7
46	466.4
47	450.8
48	435.7
49	421.3
50	407.4
51	394.0
52	381.1

53	368.7
54	356.8
55	345.4
56	334.3
57	323.7
58	313.5
59	303.6
60	294.1
61	285.0
62	276.1
63	267.6
64	259.4
65	251.5
66	243.9
67	236.6
68	229.5
69	222.6

70	216.0
71	209.6
72	203.5
73	197.5
74	191.8
75	186.2
76	180.9
77	175.7
78	170.7
79	165.8
80	161.2
81	156.6
82	152.3
83	148.0
84	144.0
85	140.0
86	136.2

87	132.5
88	128.9
89	125.4
90	122.0
91	118.8
92	115.6
93	112.6
94	109.6
95	106.7
96	104.0
97	101.3
98	98.7
99	96.1
100	93.7

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
1K7C3	1K Silver leadless chip 5% @ +25°C	1,000	1,000*
1K7C2	1K Silver leadless chip 10% @ +25°C	1,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

NORTH AMERICA

Measurement Specialties, Inc.
910 Turnpike Road
Shrewsbury, MA 01545
Tel: 1-508-842-0516
Fax: 1-508-842-0342

Sales email:
temperature.sales.amer@meas-spec.com

EUROPE

Measurement Specialties, Inc
Ballybrit Business Park
Galway Ireland
Tel: +353-91-753238
Fax: +353-91-770789

Sales email:
temperature.sales.emea@meas-spec.com

ASIA

Measurement Specialties (China) Ltd.
No. 26 Langshan Road
Shenzhen High-Tech Park (North)
Nanshan District, Shenzhen 51807
China
Tel: +86 (0) 755 33305088
Fax: +86 (0) 755 33305099

Sales email:
temperature.sales.asia@meas-spec.com

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.