

1K7CG Gold Leadless Chip



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

DESCRIPTION

Gold 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

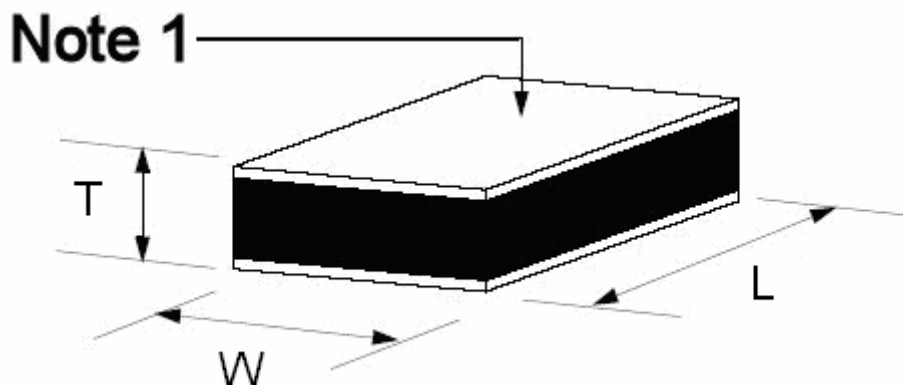
- WDM (Wavelength Division Multiplexing) for advanced frequency control in communications systems and wireless applications
- Thermopile sensors for thermal radiation recognition and infrared sensing
- Thermal protection of sensitive circuits
- Hybrid circuit temperature compensation
- Localized temperature sensing

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ +25°C	Ohms	1,000
1K7CG3 Resistance tolerance +25°C	%	± 5
1K7CG2 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

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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	Gold 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

Temp. °C	Ohms
-22	8,117.2
-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

Temp. °C	Ohms
-4	3,386.3
-3	3,234.9
-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

Temp. °C	Ohms
14	1,549.5
15	1,487.2
16	1,427.9
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

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32	767.6
33	739.8
34	713.2
35	687.6
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
1K7CG3	1K Gold leadless chip 5% @ +25°C	1,000	1,000*
1K7CG2	1K Gold leadless chip 10% @ +25°C	1,000	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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