

0.3K1CG 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

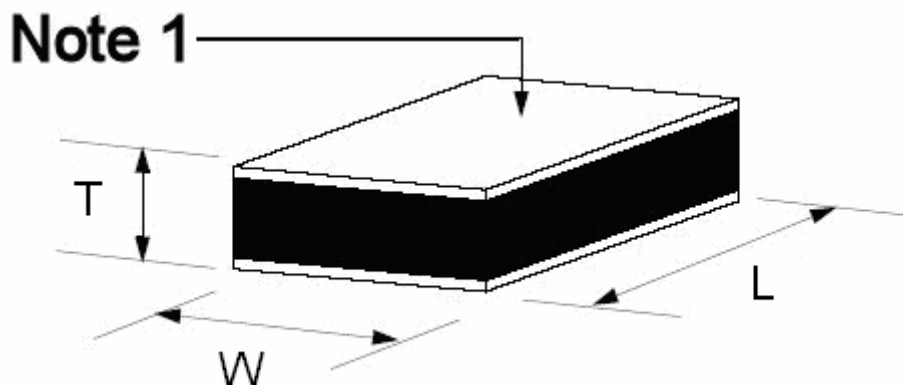
- WDM (Wavelength Division Multiplexing) for advanced frequency control in communications systems and wireless applications
- Thermopile sensors for thermal radiation recognition and infrared sensing
- Thermal protection of sensitive circuits
- Hybrid circuit temperature compensation
- Localized temperature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

PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ $+25\text{ }^{\circ}\text{C}$	Ohms	300
0.3K1CG3 Resistance tolerance $+25\text{ }^{\circ}\text{C}$	%	± 5
0.3K1CG2 Resistance tolerance $+25\text{ }^{\circ}\text{C}$	%	± 10
Alpha Value @ $25\text{ }^{\circ}\text{C}$	$\%/^{\circ}\text{C}$	- 3.5
Beta Value 25/85	K	3187
Time response in Liquids	Seconds	<1
Dissipation Constant in still air	mW/ $^{\circ}\text{C}$	1

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MECHANICAL DETAILS



	Dimensions					
	Millimeters			Inches		
	L	W	T	L	W	T
	0.914	0.914	0.381	0.036	0.036	0.015
Note 1	Gold Metalisation					

RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	4,219.5
-39	4,030.2
-38	3,850.2
-37	3,678.8
-36	3,515.7
-35	3,360.4
-34	3,212.6
-33	3,071.9
-32	2,937.8
-31	2,810.1
-30	2,688.4
-29	2,572.4
-28	2,461.9
-27	2,356.5
-26	2,256.0
-25	2,160.1
-24	2,068.7
-23	1,981.5

Temp. °C	Ohms
-22	1,898.3
-21	1,818.9
-20	1,743.0
-19	1,670.7
-18	1,601.5
-17	1,535.5
-16	1,472.5
-15	1,412.2
-14	1,354.7
-13	1,299.7
-12	1,247.1
-11	1,196.8
-10	1,148.8
-9	1,102.8
-8	1,058.9
-7	1,016.8
-6	976.6
-5	938.1

Temp. °C	Ohms
-4	901.2
-3	866.0
-2	832.2
-1	799.9
0	768.9
1	739.2
2	710.8
3	683.6
4	657.5
5	632.5
6	608.6
7	585.6
8	563.6
9	542.5
10	522.2
11	502.8
12	484.2
13	466.3

Temp. °C	Ohms
14	449.1
15	432.7
16	416.9
17	401.7
18	387.1
19	373.1
20	359.7
21	346.8
22	334.4
23	322.5
24	311.0
25	300.0
26	289.4
27	279.3
28	269.5
29	260.1
30	251.0
31	242.4

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32	234.0
33	225.9
34	218.2
35	210.8
36	203.6
37	196.7
38	190.0
39	183.6
40	177.5
41	171.6
42	165.8
43	160.3
44	155.0
45	149.9
46	145.0
47	140.3
48	135.7
49	131.3

50	127.0
51	122.9
52	119.0
53	115.2
54	111.5
55	108.0
56	104.5
57	101.2
58	98.1
59	95.0
60	92.0
61	89.2
62	86.4
63	83.7
64	81.1
65	78.7
66	76.3
67	73.9

68	71.7
69	69.5
70	67.4
71	65.4
72	63.5
73	61.6
74	59.7
75	58.0
76	56.3
77	54.6
78	53.0
79	51.5
80	50.0
81	48.5
82	47.1
83	45.8
84	44.5
85	43.2

86	42.0
87	40.8
88	39.6
89	38.5
90	37.4
91	36.4
92	35.4
93	34.4
94	33.4
95	32.5
96	31.6
97	30.8
98	29.9
99	29.1
100	28.3

ORDERING INFORMATION

Part Number	Description	Ω @25°C	MOQ
0.3K1CG3	0.3K Gold leadless chip 5% @ +25°C	300	1,000*
0.3K1CG2	0.3K Gold leadless chip 10% @ +25°C	300	1,000*

* For quantities less than Minimum Order Quantity – Contact Distribution

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