

# 5K3CG 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  $+125\text{ }^{\circ}\text{C}$

## APPLICATIONS

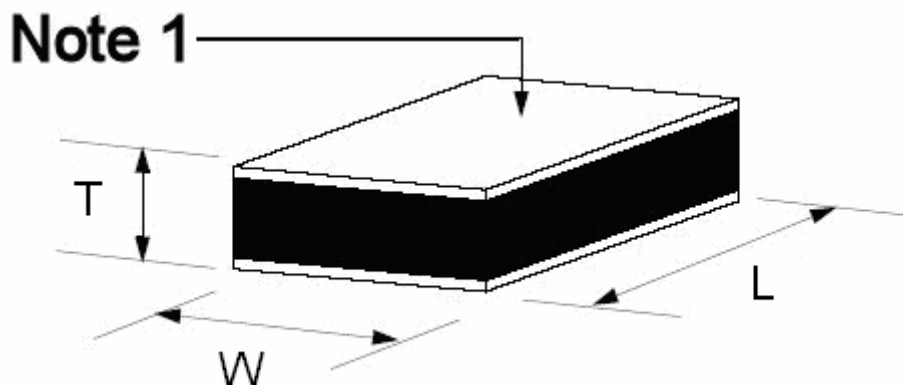
- WDM (Wavelength Division Multiplexing) for advanced frequency control in communications systems and wireless applications
- Thermopile sensors for thermal radiation recognition and infrared sensing
- Thermal protection of sensitive circuits
- Hybrid circuit temperature compensation
- Localized temperature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

## PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ $+25\text{ }^{\circ}\text{C}$	Ohms	5,000
5K3CG3 Resistance tolerance $+25\text{ }^{\circ}\text{C}$	%	$\pm 5$
5K3CG2 Resistance tolerance $+25\text{ }^{\circ}\text{C}$	%	$\pm 10$
Alpha Value @ $25\text{ }^{\circ}\text{C}$	$\text{\%/}^{\circ}\text{C}$	- 4.39
Beta Value 25/85	K	3976
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
	1.397	1.397	0.305	0.055	0.055	0.012
<b>Note 1</b>	Gold Metalisation					

## RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
-40	167862
-39	157111
-38	147117
-37	137820
-36	129169
-35	121114
-34	113611
-33	106620
-32	100102
-31	94022
-30	88349
-29	83054
-28	78107
-27	73486
-26	69166
-25	65127
-24	61348
-23	57811
-22	54499

Temp. °C	Ohms
-21	51397
-20	48490
-19	45765
-18	43210
-17	40812
-16	38562
-15	36450
-14	34465
-13	32601
-12	30848
-11	29200
-10	27649
-9	26191
-8	24817
-7	23524
-6	22306
-5	21158
-4	20075
-3	19055

Temp. °C	Ohms
-2	18092
-1	17183
0	16325
1	15515
2	14750
3	14027
4	13344
5	12698
6	12086
7	11508
8	10961
9	10443
10	9952
11	9487
12	9046
13	8629
14	8233
15	7857
16	7501

Temp. °C	Ohms
17	7162
18	6841
19	6536
20	6247
21	5972
22	5710
23	5461
24	5225
<b>25</b>	<b>5000</b>
26	4786
27	4582
28	4388
29	4204
30	4028
31	3860
32	3701
33	3549
34	3403
35	3265

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36	3133
37	3007
38	2887
39	2772
40	2662
41	2558
42	2458
43	2362
44	2271
45	2183
46	2100
47	2020
48	1944
49	1870
50	1800
51	1733
52	1669
53	1608
54	1549
55	1493
56	1438
57	1387
58	1337
59	1289

60	1244
61	1200
62	1158
63	1117
64	1078
65	1041
66	1005
67	971
68	938
69	906
70	876
71	847
72	818
73	791
74	765
75	740
76	716
77	693
78	670
79	649
80	628
81	608
82	589
83	570

84	553
85	535
86	519
87	503
88	487
89	472
90	458
91	444
92	431
93	418
94	406
95	394
96	382
97	371
98	360
99	349
100	339
101	330
102	320
103	311
104	302
105	294
106	285
107	277

108	270
109	262
110	255
111	248
112	241
113	235
114	228
115	222
116	216
117	211
118	205
119	200
120	194
121	189
122	184
123	180
124	175
125	170

## ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
5K3CG3	5K Gold leadless chip 5% @ +25°C	5,000	1,000*
5K3CG2	5K Gold leadless chip 10% @ +25°C	5,000	1,000*

\* For quantities less than Minimum Order Quantity – Contact Distribution

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