

# 30K5CG 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

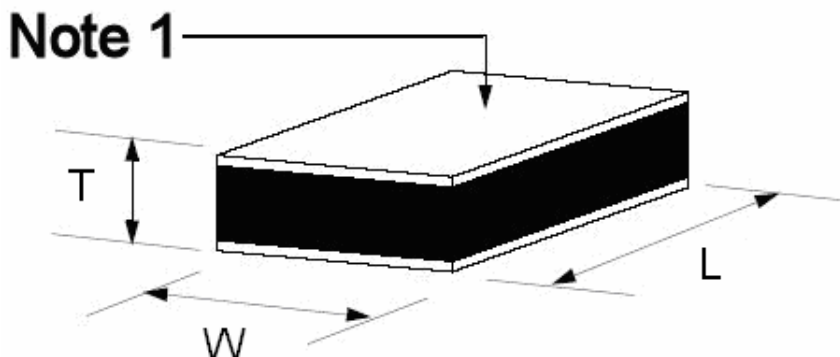
- WDM (Wavelength Division Multiplexing) for advanced frequency control in communications systems and wireless applications
- Thermopile sensors for thermal radiation recognition and infrared sensing
- Thermal protection of sensitive circuits
- Hybrid circuit temperature compensation
- Localized temperature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

## PERFORMANCE SPECS

Parameters	Units	Value
Resistance @ $+25\text{ }^{\circ}\text{C}$	Ohms	30,000
30K5CG3 Resistance tolerance $+25\text{ }^{\circ}\text{C}$	%	$\pm 5$
30K5CG2 Resistance tolerance $+25\text{ }^{\circ}\text{C}$	%	$\pm 10$
Alpha Value @ $25\text{ }^{\circ}\text{C}$	$\text{\%/}^{\circ}\text{C}$	- 4.30
Beta Value 25/85	K	3942
Time response in Liquids	Seconds	<1
Dissipation Constant in still air	mW/ $^{\circ}\text{C}$	1

# 30K5CG Gold leadless chip

## MECHANICAL DETAILS



	Dimensions					
	Millimeters			Inches		
	L	W	T	L	W	T
	0.889	0.889	0.381	0.035	0.035	0.015
<b>Note 1</b>	Gold Metalisation					

## RESISTANCE V TEMPERATURE TABLE

Temp. °C	Ohms
----------	------

-40	884198
-39	830463
-38	780301
-37	733457
-36	689693
-35	648790
-34	610546
-33	574773
-32	541299
-31	509964
-30	480620
-29	453130
-28	427367
-27	403213
-26	380560
-25	359305
-24	339357
-23	320627
-22	303035
-21	286506

Temp. °C	Ohms
----------	------

-20	270969
-19	256362
-18	242622
-17	229694
-16	217526
-15	206069
-14	195278
-13	185111
-12	175529
-11	166495
-10	157975
-9	149937
-8	142352
-7	135191
-6	128429
-5	122041
-4	116006
-3	110301
-2	104907
-1	99806

Temp. °C	Ohms
----------	------

0	94980
1	90413
2	86090
3	81996
4	78119
5	74445
6	70964
7	67663
8	64534
9	61565
10	58749
11	56076
12	53539
13	51129
14	48841
15	46667
16	44601
17	42637
18	40769
19	38993

Temp. °C	Ohms
----------	------

20	37303
21	35696
22	34166
23	32709
24	31321
<b>25</b>	<b>30000</b>
26	28741
27	27541
28	26398
29	25307
30	24268
31	23276
32	22329
33	21426
34	20564
35	19741
36	18955
37	18204
38	17487
39	16801

# 30K5CG Gold leadless chip

40	16146
41	15519
42	14920
43	14347
44	13799
45	13274
46	12772
47	12292
48	11831
49	11391
50	10968
51	10564
52	10176
53	9805
54	9449
55	9107
56	8780
57	8466
58	8164
59	7875
60	7597
61	7331

62	7075
63	6829
64	6593
65	6366
66	6148
67	5939
68	5738
69	5544
70	5358
71	5179
72	5007
73	4841
74	4682
75	4528
76	4381
77	4239
78	4102
79	3970
80	3843
81	3721
82	3603
83	3489

84	3380
85	3274
86	3172
87	3074
88	2979
89	2888
90	2800
91	2715
92	2633
93	2554
94	2477
95	2403
96	2332
97	2263
98	2197
99	2132
100	2070
101	2010
102	1952
103	1896
104	1842
105	1789

106	1739
107	1690
108	1642
109	1596
110	1552
111	1509
112	1467
113	1427
114	1388
115	1350
116	1314
117	1278
118	1244
119	1211
120	1178
121	1147
122	1117
123	1087
124	1059
125	1031

## ORDERING INFORMATION

Part Number	Description	$\Omega$ @25°C	MOQ
30K5CG3	30K Gold leadless chip 5% @ +25°C	30,000	1,000*
30K5CG2	30K Gold leadless chip 10% @ +25°C	30,000	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](mailto: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](mailto: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](mailto: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.