



MATERIAL TYPE: GC5

AVAILABLE PRODUCTS: GC32

Data for material type : H

Temp Range (°C)	Ratio	Beta
0 to 50	8.60	3799
0 to 70	17.52	3834
25 to 50	2.72	3860
25 to 85	9.03	3916
25 to 100	14.20	3936
25 to 125	28.22	3965
37.8 to 104.4	9.51	3967

To calculate Rt/R25 at temperatures other than those listed in the table, use the following equation:

$$Rt/R25 = \exp\{A + B/T + C/T^2 + D/T^3\}$$

where T = temperature in K

Temp Range (°C)	A	B	C	D
0 to 50	-1.4346562E+01	4.5444118E+03	-1.9845714E+04	-1.7816128E+07
50 to 100	-1.4431053E+01	4.6325430E+03	-5.0526624E+04	-1.4253564E+07
100 to 150	-1.5776218E+01	6.2312948E+03	-6.8269468E+05	6.8919829E+07
150 to 200	-1.6267741E+01	6.9947735E+03	-1.0587644E+06	1.2859129E+08
200 to 250	-8.8974389E+00	-3.4568607E+03	3.8934127E+06	-6.5541197E+08

To calculate the actual thermistor temperature as a function of the thermistor resistance, use the following equation:

$$1/T = a + b(\ln Rt/R25) + c(\ln Rt/R25)^2 + d(\ln Rt/R25)^3$$

Rt/R25 range	a	b	c	d
3.1592 to 0.3673	3.3540152E-03	2.6246486E-04	3.6116391E-06	1.8591480E-07
0.3673 to 0.07040	3.3538722E-03	2.6217273E-04	3.3931364E-06	1.1698246E-07
0.07040 to 0.01919	3.3439862E-03	2.5265642E-04	3.7667244E-07	-1.9743623E-07
0.01919 to 0.00674	3.3274815E-03	2.4094404E-04	-2.1702310E-06	-3.5932291E-07
0.00674 to 0.00286	3.3675858E-03	4.2316222E-04	3.3783142E-05	2.0234288E-06

†The deviation resulting from the tolerance on the material constant, Beta. The deviation must be added to the resistance tolerance of the part as specified at 25°C.

Temperature (°C)	Rt/R25 nominal	Temp Coef (%/°C)
0	3.1592	4.94%
5	2.4769	4.80%
10	1.9554	4.66%
15	1.5539	4.53%
20	1.2427	4.41%
25	1.0000	4.29%
30	0.8095	4.17%
35	0.6590	4.06%
40	0.5395	3.95%
45	0.4440	3.85%
50	0.3673	3.75%
55	0.3053	3.65%
60	0.2550	3.55%
65	0.2140	3.46%
70	0.18035	3.38%
75	0.15267	3.29%
80	0.12977	3.21%
85	0.11074	3.13%
90	0.09487	3.06%
95	0.08158	2.99%
100	0.07040	2.91%
105	0.06097	2.84%
110	0.05298	2.78%
115	0.04618	2.72%
120	0.04039	2.65%
125	0.03543	2.60%
130	0.03117	2.54%
135	0.02750	2.47%
140	0.02433	2.43%
145	0.02158	2.36%
150	0.01919	2.32%
155	0.01711	2.25%
160	0.01530	2.22%
165	0.01370	2.15%
170	0.01231	2.15%
175	0.01107	2.08%
180	0.00999	2.05%
185	0.00903	2.00%
190	0.00818	1.96%
195	0.00742	1.95%
200	0.00674	1.85%
205	0.00614	1.87%
210	0.00561	1.88%
215	0.00512	1.76%
220	0.00469	1.71%
225	0.00430	1.74%
230	0.00395	1.65%
235	0.00364	1.65%
240	0.00335	1.64%
245	0.00309	1.62%
250	0.00286	1.57%