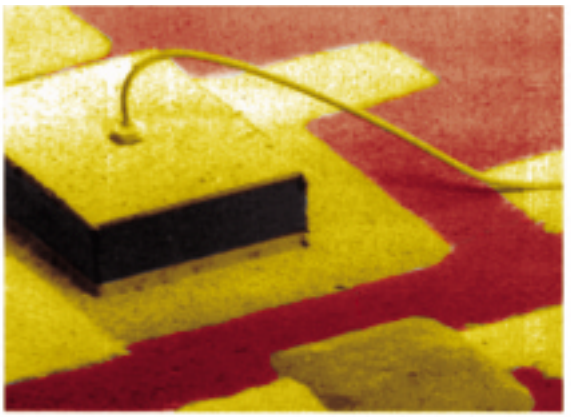

SEM Photo 30x Hybrid Thermistor Chip

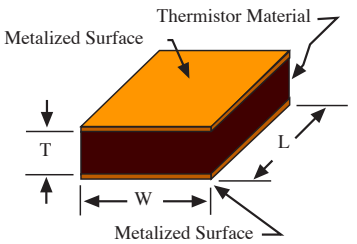

Figure # 1

Sample Part Number:

10K 3 CG 3

- 10K — Resistance Value @ 25°C
- 3 — Material Curve #
- CG — Chip Thermistor with Gold
- 3 — Tolerance Code @ 25°C

Gold Termination BetaCHIP Thermistors:

Applications

- **WDM (Wavelength Division Multiplexing) for advanced frequency control in modern 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.**

Features:

- **Rapid Time Response (<1 second typical in liquids).**
- **Standards supplied with 5% and 10% tolerance.**
- **1% and 2% available upon request.**
- **Surface Mount Capability.**
- **1 mW/°C Dissipation Constant in air at 25°C.**
- **Uniformly Sized for Pick & Place Assembly.**
- **Higher precision tolerance available.**
- **Square and Rectangular Configurations.**

BetaTHERM offer high reliability **Gold** terminated leadless *BetaCHIP* thermistors that meet today's hybrid microelectronics needs and are offered by *BetaTHERM*. With metalization on top and bottom surfaces, attachment to hybrid, IC or PC circuits is accomplished using industry standard die attach and wire bonding techniques. Chips may be soldered or conductive epoxied to board termination points where space is at a premium. Typical chip sizes (1mm x 1mm x 0.25mm thick) allow for accurate robotic placement. **Gold** *BetaCHIP* thermistors are supplied in "gel" or "waffle" packs.

Gold Metalized BetaCHIP Thermistor Part Numbers and Specifications:

Part Number for +/- 5% @ 25 °C	Part Number for +/- 10% @ 25°C	Resistance @ 25 °C (ohms)	Alpha @ 25 °C	0/50 °C Beta Value	Curve #	Nominal Chip Dimensions (mm) L	W	T	Nominal Chip Dimensions (in) L	W	T
0.1K1CG3	0.1K1CG2	100	-3.50%	3108	1	1.397	1.397	0.305	0.055	0.055	0.012
0.3K1CG3	0.3K1CG2	300	-3.50%	3108	1	0.914	0.914	0.381	0.036	0.036	0.015
1K2CG3	1K2CG2	1000	-3.68%	3263	2	0.762	0.762	0.381	0.030	0.030	0.015
1K7CG3	1K7CG2	1000	-3.87%	3422	7	1.067	1.067	0.381	0.042	0.042	0.015
2.2K3CG3	2.2K3CG2	2252	-4.39%	3892	3	1.905	1.905	0.254	0.075	0.075	0.010
3K3CG3	3K3CG2	3000	-4.39%	3892	3	1.651	1.651	0.254	0.065	0.065	0.010
5K3CG3	5K3CG2	5000	-4.39%	3892	3	1.397	1.397	0.305	0.055	0.055	0.012
10K3CG3	10K3CG2	10000	-4.39%	3892	3	1.016	1.016	0.305	0.040	0.040	0.012
10K4CG3	10K4CG2	10000	-4.04%	3575	4	1.143	1.143	0.254	0.045	0.045	0.010
30K5CG3	30K5CG2	30000	-4.30%	3811	5	0.889	0.889	0.381	0.035	0.035	0.015
30K6CG3	30K6CG2	30000	-4.68%	4143	6	1.397	1.397	0.305	0.055	0.055	0.012
50K6CG3	50K6CG2	50000	-4.68%	4143	6	1.143	1.143	0.381	0.045	0.045	0.015
100K6CG3	100K6CG2	100000	-4.68%	4143	6	0.889	0.889	0.381	0.035	0.035	0.015
1M9CG3	1M9CG2	1000000	-5.20%	4582	9	0.889	0.889	0.254	0.035	0.035	0.010