NTC THERMISTORS: TYPE G GL

GLASS ENCAPSULATED BEAD

DESCRIPTION:

Type G thermistors incorporate a directly heated bead of semiconductor material in a solid glass pellet, connection being by means of two cunife wires. These wires are normally tinned but thermistors G55, G26 and G16 which are intended to operate at temperatures up to 300°C have untinned cunife wires suitable for welding or brazing.

The type G thermistor is available in three styles of glass pellet, the largest size is referred to as 'Standard' (G-C), the smaller size as 'Miniature' (G-D) and the Probe as GL - eg a miniature G13 is coded G13D.

These thermistors are suitable for general use in the field of temperature measurement, control or compensation, flow measurement and similar applications.

DATA:

B value tolerance .....±5%

Thermal Time Constant

G - C 21s

G - D 19s

Dissipation Constant

G - C 1.3mW/K

G - D 1.1mW/K

GL - 1.2mW/K

LOW RESISTANCE TYPES:

T_A max .....125°C

T_B max .....125°C

P_{max} at 20°C G - C 140mW

G - C 120mW

GL 130mW

Derate linearly to zero at 125°C

MEDIUM RESISTANCE TYPES:

T_A max .....155°C

T_B max .....200°C

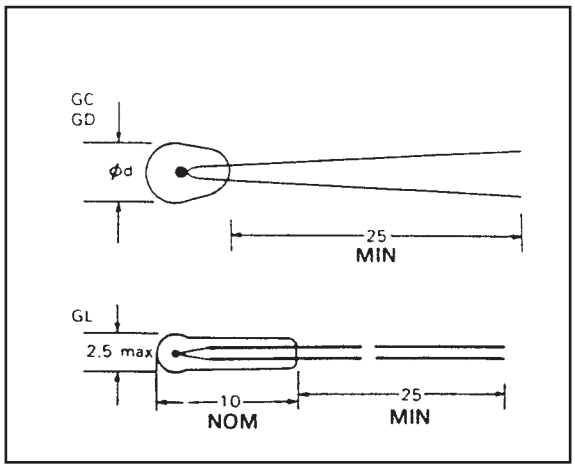
P_{max} at 20°C G - C 230mW

G - D 200mW

GL 220mW

G - C Derate linearly to 55mW at 155°C

DIMENSIONS:



G - D Derate linearly to 50mW at 155°C

GL - Derate linearly to 53mW at 155°C

HIGH RESISTANCE TYPES:

T_A max .....300°C

T_B max .....300°C

P_{max} at 20°C G - C 360mW

G - D 310mW

GL - 340mW

Derate linearly to zero at 300°C.

Code	Lead Dia. mm	Body Dia. (max)	Average Weight
G-C	0.4	3.2	0.15
G-D	0.35	2.5	0.11
GL-	0.35	2.5	

BOWTHORPE THERMOMETRICS
Crown Industrial Estate, Priorswood Road
Taunton, Somerset TA2 8QY UK
Tel +44 (0) 1823 335200
Fax +44 (0) 1823 332637

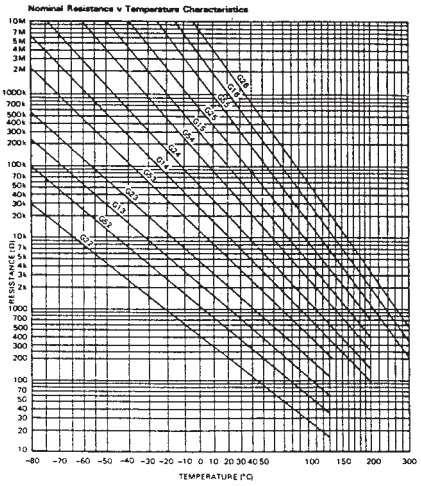
THERMOMETRICS, INC.
808 US Highway 1
Edison, New Jersey 08817-4695 USA
Tel +1 (732) 287 2870
Fax +1 (732) 287 8847

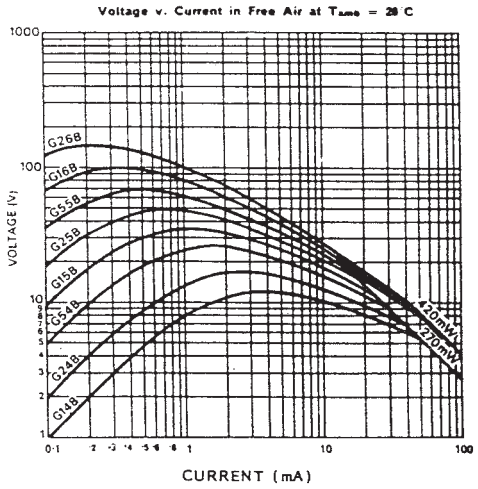
KEYSTONE THERMOMETRICS CORPORATION
967 Windfall Road
St Marys, Pennsylvania 15857-3397 USA
Tel +1 (814) 834 9140
Fax +1 (814) 781 7969

NTC THERMISTORS: TYPE G GL

GLASS ENCAPSULATED BEAD

Code	R_{20} Ω	R_{25} Ω	E_{max} in free air at 20°C GC only (V)	R_{min} Ω	$B_{25\text{-}85}$ K
Low resistance types					
G22 C, D and L	200	172	1.9	19	2750
G52	500	425	2.9	40	2900
G13	1k	840	3.9	70	3000
G23	2k	1.65k	5.3	113	3125
G53	5k	4.15k	8.2	250	3400
Medium resistance types					
G14	10k	8.2k	11	110	3600
G24	20k	16.2k	16	160	3800
G54	50k	40k	24	320	4075
G15	100k	79k	34	520	4275
G25	200k	156k	46	810	4400
High resistance types		R_{100}			$B_{100\text{-}200}$
G55	500k	15k	62	180	4700
G16	1M	30k	87	330	4850
G26	2M	60k	120	560	5000





Example	Description	Standard Values
G	sensor style	G = pellet GL = probe
54	resistance code	see above table
C	body size	C = standard D = miniature (not applicable to GL)
Y	resistance or response temperature	W = ±20% Y = ±10% Z = ±5%

CODING:

Resistance/tolerance and physical style are specified by the product code.

e.g. G54CY

BOWTHORPE THERMOMETRICS
Crown Industrial Estate, Priorswood Road
Taunton, Somerset TA2 8QY UK
Tel +44 (0) 1823 335200
Fax +44 (0) 1823 332637

THERMOMETRICS, INC.
808 US Highway 1
Edison, New Jersey 08817-4695 USA
Tel +1 (732) 287 2870
Fax +1 (732) 287 8847

KEYSTONE THERMOMETRICS CORPORATION
967 Windfall Road
St Marys, Pennsylvania 15857-3397 USA
Tel +1 (814) 834 9140
Fax +1 (814) 781 7969