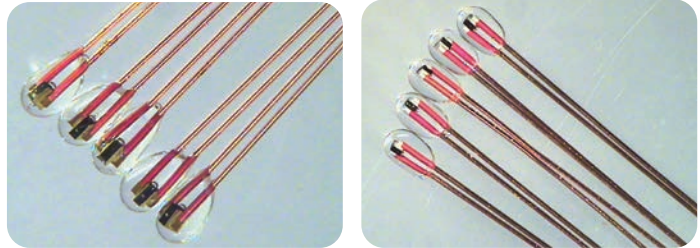


Amphenol

Advanced Sensors

NTC Type NG Glass Encapsulated Chip Thermistor



Overview

- Miniature NTC chip thermistors with uncoated copper clad Dumet leads
- Glass encapsulated NTC for high temperature operation
- Small size for high sensitivity and accurate temperature sensing in space restricted applications

Features

- Designed for accurate temperature measurement, control & compensation
- Tight tolerances on resistance and B value
- Operation up to 300°C with excellent stability
- Small body diameter, fast response
- AEC Q200 tested
- Not ESD sensitive
- Suitable for automotive, EGR, TMAP, OAT, XEV, HVAC, & white goods applications
- RoHS 2011/65/EU / REACH compliant

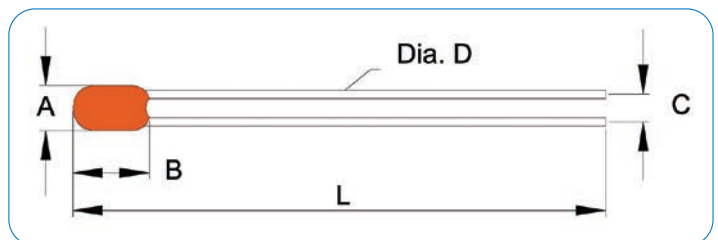
Options

- 5k to 100kΩ resistance values and B values within the ranges shown
- Alternative reference temperatures 25°C, 50°C, 100°C, 200°C
- Max operating temperature 200°C or 300°C
- Bulk packed
- Special head sizes Ø 0.8mm to Ø 2.2mm
- Contact Amphenol for specific application requirements

Specifications

Min. operating temp.	-40°C	
Max. operating temp.	200°C	
	300°C	(H type)
Thermal time constant	12s	(2mm)
(cooling in air)	6s	(1.35mm)
Dissipation factor (nom)	1.3 mW/K	(2mm)
	0.7 mW/K	(1.35mm)
Mass	0.07g	
Packing / MOQ	500pcs/box	(bulk)

Dimensions (mm)



Glass dia. Code	Head width	Head length	Spacing nom.	Wire dia.	Total length
	A	B	C	D	L
1	2.20 ±0.2	3.4 ±0.3	0.3	0.30 ±0.03	70 ±3
2	1.60 ±0.2	2.9 ±0.3	0.3	0.25 ±0.03	70 ±3
3	1.35 ±0.2	2.6 ±0.3	0.3	0.20 ±0.03	70 ±3
4	1.30 ±0.2	2.5 ±0.3	0.3	0.20 ±0.03	70 ±3

NTC Type NG Thermistor

NG Standard Range Resistance Values

R25 Nom	Beta (25/85°C) Nom	Code	* Reference tolerance	Maximum Temperature	Special B range	Special B value	Reference temp.	Ref temp. resistance
Ω	K		%	°C	°C	K	°C	Ω
5000	3548	NG*A502R_	1, 2	200	25-50	3470	-	-
8500	3472	NG*D852T50R3H	3	300	0-100	3450	50	3485
8525	3469	NG*D852T50R3	3	200	0-100	3450	50	3485
10000	3250	NG*F103B325R_	1, 2	200	-	-	-	-
10000	3435	NG*D103R_H	1, 2	300	-	-	-	-
10000	3435	NG*D103R_	1, 2	200	-	-	-	-
10000	3535	NG*A103R_	1, 2	200	25-50	3470	-	-
10000	3997	NG*F103R_	1, 2	200	25-50	3950	-	-
20000	4000	NG*F203R_	1, 2	200	25-50	3950	-	-
49150	4000	NG*F493T100R3H	3	300	0-100	3970	100	3300
49630	4000	NG*F493T100R3	3	200	0-100	3970	100	3300
50000	4030	NG*F503B403R_	1, 2	200	25-50	3950	-	-
50000	4084	NG*F503B408R_	1, 2	200	25-50	4016	-	-
99163	4076	NG*F993T200R3	3	200	100-200	4300	200	550
100000	4025	NG*F104R_	1, 2	200	25-50	3950	-	-
100000	4046	NG*F104R_H	1, 2	300	25-50	3990	-	-
100000	4267	NG*G104R_H	1, 2	300	-	-	-	-
231600	4240	NG*G234T200R3H	3	300	100-200	4537	200	1000
231726	4240	NG*G234T200R3	3	200	100-200	4537	200	1000

(Other values available upon request)

See separate tables for resistance - temperature data

Coding	
Glass size option	1/2/3/4 See dimension table
Beta range (25°C/85°C)	A(3500K-3600K), D(3400K). F(4000K), G(4200K)
Resistance code	e.g. 103 (1, 0, 3x0) = 10000Ω
Non-standard ref. temperature	T*** e.g. T200
Non-standard Beta value	B*** e.g. B408
Resistance tolerance option	"_"
Standard temperature	200°C NG
High temperature	300°C NG....H

Example Coding:

Code	Product Type	B 25/85 Range	R25 Nominal	Ref. temp. °C	R Tolerance %	Head Diameter
NG3D852T50R3H	300°C	D	8.5kΩ	T 50	R 3	1.35mm

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