

T H E R M O M E T R I C S
A COMMITMENT TO EXCELLENCE

NTC Type NK

Thermometrics HTF1

Silicone-Coated Chip

Thermistor



Description

Thermometrics has developed a new high-volume continuous coating process for liquid silicone insulated chip thermistors to enable cost-effective and tight tolerance insulated thermistors for temperature sensing. Amphenol's Thermometrics NTC Silicone HTF1 Type NK is a range of NTC chip thermistors with solder-coated Alloy 52/ Steel wires and silicone coating.

Features

- Designed for accurate temperature measurement, control and compensation
- Up to **32mm** coating length
- Flexible
- AEC-Q200 qualified
- Tight tolerances on resistance and B value
- Operation up to 338°F (170°C) with excellent stability
- Head diameters down to 2.4mm
- Faster time response than epoxy
- Suitable for automotive and high performance industrial applications
- Available on bandolier to IEC 286-2

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HTF1 Type NK Specifications

Chip thermistor with solder-coated wires. Alloy 52/steel wires and silicone coating.

Ordering Information

Replace * in the codes shown above as follows:

- Loose-packed: R
- Bandoliered: B

Options

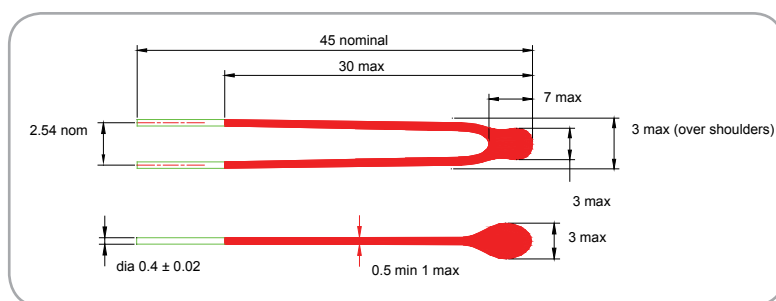
- Other resistance values within the ranges shown;
- e.g. code NK701C2*2 for $700 \Omega \pm 2\%$ at 77°F (25°C)
- Reference temperatures other than 77°F (25°C)
- Wire lengths 0.47 in to 1.57 in (12 mm to 40 mm) (± 1 mm)

Data

- Operating Temperature range: -40°C to $+170^\circ\text{C}$
- Insulation lengths: 3mm to 32mm
- Electrical Insulation:
500V DC water immersion at 25°C $R > 100\text{M}\Omega$
Dielectric strength 20kV/mm
- Response time (cooling): 12 seconds
- Thermal shock: 1000 cycles $-40^\circ\text{C}/155^\circ\text{C}$

R25 Ω	Material System	B25/125 K	Maximum Operating Temperature $^\circ\text{F}$ ($^\circ\text{C}$)
500	2	$3540 \pm 1\%$	338 (170)
1000	2	$3540 \pm 1\%$	338 (170)
2000	2	$3540 \pm 1\%$	338 (170)
500	2A	$3627 \pm 1\%$	338 (170)
1000	2A	$3627 \pm 1\%$	338 (170)
2000	2A	$3627 \pm 1\%$	338 (170)
2200	1	$3977 \pm 0.75\%$	338 (170)
2700	1	$3977 \pm 0.75\%$	338 (170)
5000	1	$3977 \pm 0.75\%$	338 (170)
10000	1	$3977 \pm 0.75\%$	338 (170)
2200	3	$3960 \pm 1\%$	338 (170)
2700	3	$3960 \pm 1\%$	338 (170)
5000	3	$3960 \pm 1\%$	338 (170)
10000	3	$3960 \pm 1\%$	338 (170)
5000	4A	$3435 \pm 1\%$	338 (170)
10000	4A	$3435 \pm 1\%$	338 (170)
10000	5	$3540 \pm 1.5\%$	338 (170)
12000	5	$3540 \pm 1.5\%$	338 (170)

See separate tables for resistance - temperature data.



NTC HFT1 Type NK Dimensions

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www.amphenol-sensors.com

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