

T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

NTC Type NDP

Thermometrics Epoxy-Coated Chip Thermistor



Description

A range of epoxy-coated chips with insulated 0.0078 in (0.25 mm) monel lead-wires.

Features

- Designed for accurate temperature measurement, control and compensation
- Tight tolerances on resistance and B value
- Operation up to 311°F (155°C) with excellent stability
- Small body size
- Fast response
- Epoxy resin provides voltage insulation
- Suitable for automotive, HVAC and white goods applications
- Limited heat conduction along monel (copper nickel) lead-wires

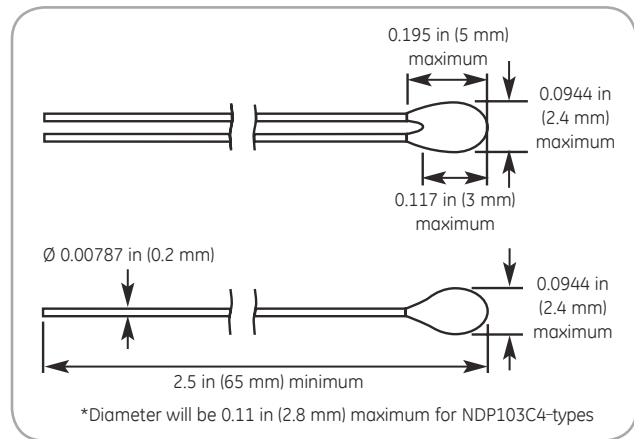
Amphenol
Advanced Sensors

Type NDP Specifications

Epoxy-coated chip thermistor

Options

- Other resistance values within the ranges shown; e.g. code NDP152C2R1 for $1500 \pm 1\%$ at 77°F (25°C) in the range of 32°F (0°C) up to the maximum
- operating temperature
- Reference temperatures
- Wire lengths 1.181 in to 23.62 in (30 mm to 600 mm) (± 1 mm or $\pm 2\%$, whichever is the greater)
- Other wire materials
- Other wire insulation colors



NTC Type NDP Dimensions

Data

- Minimum operating temperature: -40°F (-40°C)
- Thermal time constant: <20 s
- Dissipation factor: 1.5 mW/K
- Voltage insulation: 500 VDC
- Wire insulation: cadmium free red PTFE
- Packing: 500/box

R25 Ω	Material System	B25/125 K	Maximum Operating Temperature $^\circ\text{F}$ ($^\circ\text{C}$)	Code R25 $^\circ\text{C} \pm 1\%$	Code R25 $^\circ\text{C} \pm 2\%$	Code R25 $^\circ\text{C} \pm 3\%$	Code R25 $^\circ\text{C} \pm 5\%$	Code R25 $^\circ\text{C} \pm 10\%$
1000	2	$3540 \pm 1\%$	257 (125)	NDP102C2R1	NDP102C2R2	NDP102C2R3	NDP102C2R5	NDP102C2R10
2000	2	$3540 \pm 1\%$	257 (125)	NDP202C2R1	NDP202C2R2	NDP202C2R3	NDP202C2R5	NDP202C2R10
5000	2	$3540 \pm 1\%$	257 (125)	NDP502C2R1	NDP502C2R2	NDP502C2R3	NDP502C2R5	NDP502C2R10
1000	2A	$3627 \pm 1\%$	257 (125)	NDP102C2AR1	NDP102C2AR2	NDP102C2AR3	NDP102C2AR5	NDP102C2AR10
2000	2A	$3627 \pm 1\%$	257 (125)	NDP202C2AR1	NDP202C2AR2	NDP202C2AR3	NDP202C2AR5	NDP202C2AR10
5000	2A	$3627 \pm 1\%$	257 (125)	NDP502C2AR1	NDP502C2AR2	NDP502C2AR3	NDP502C2AR5	NDP502C2AR10
2700	1	$3977 \pm 0.75\%$	311 (155)	NDP272C1R1	NDP272C1R2	NDP272C1R3	NDP272C1R5	NDP272C1R10
5000	1	$3977 \pm 0.75\%$	311 (155)	NDP502C1R1	NDP502C1R2	NDP502C1R3	NDP502C1R5	NDP502C1R10
10000	1	$3977 \pm 0.75\%$	311 (155)	NDP103C1R1	NDP103C1R2	NDP103C1R3	NDP103C1R5	NDP103C1R10
30000	1	$3977 \pm 0.75\%$	311 (155)	NDP303C1R1	NDP303C1R2	NDP303C1R3	NDP303C1R5	NDP303C1R10
50000	1	$3977 \pm 0.75\%$	311 (155)	NDP503C1R1	NDP503C1R2	NDP503C1R3	NDP503C1R5	NDP503C1R10
2700	3	$3960 \pm 1\%$	311 (155)	NDP272C3R1	NDP272C3R2	NDP272C3R3	NDP272C3R5	NDP272C3R10
5000	3	$3960 \pm 1\%$	311 (155)	NDP502C3R1	NDP502C3R2	NDP502C3R3	NDP502C3R5	NDP502C3R10
10000	3	$3960 \pm 1\%$	311 (155)	NDP103C3R1	NDP103C3R2	NDP103C3R3	NDP103C3R5	NDP103C3R10
30000	3	$3960 \pm 1\%$	311 (155)	NDP303C3R1	NDP303C3R2	NDP303C3R3	NDP303C3R5	NDP303C3R10
50000	3	$3960 \pm 1\%$	311 (155)	NDP503C3R1	NDP503C3R2	NDP503C3R3	NDP503C3R5	NDP503C3R10
12000	5	$3740 \pm 1\%$	257 (125)	NDP123C5R1	NDP123C5R2	NDP123C5R3	NDP123C5R5	NDP123C5R10
10000	4	$3435 \pm 1\%$	230 (110)	NDP103C4R1	NDP103C4R2	NDP103C4R3	NDP103C4R5	NDP103C4R10
30000	4	$3435 \pm 1\%$	230 (110)	NDP303C4R1	NDP303C4R2	NDP303C4R3	NDP303C4R5	NDP303C4R10
50000	4	$3435 \pm 1\%$	230 (110)	NDP503C3R1	NDP503C3R2	NDP503C3R3	NDP503C3R5	NDP503C3R10
100000	4	$3435 \pm 1\%$	230 (110)	NDP104C4R1	NDP104C4R2	NDP104C4R3	NDP104C4R5	NDP104C4R10

See separate tables for resistance - temperature data.

Amphenol
Advanced Sensors

www.amphenol-sensors.com

© 2014 Amphenol Corporation. All Rights Reserved. Specifications are subject to change without notice.
Other company names and product names used in this document are the registered trademarks or
trademarks of their respective owners.

AAS-920-577A-03/2014