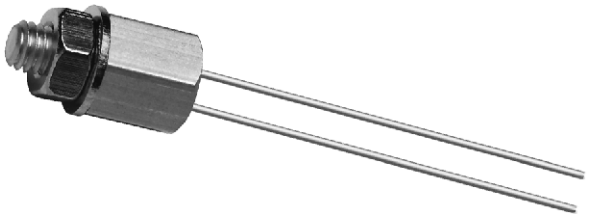
NTC Thermistors, Screw Threaded Sensors



FEATURES

- Easy mounting
- Rugged construction
- Replaces the serie 2322 640 7....
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

RoHS COMPLIANT

APPLICATIONS

Temperature measurement, sensing and control.

Suitable for many applications, especially when a good electrical insulation and a good thermal contact with the chassis is required.

DESCRIPTION

The thermistors are made of NTC ceramic material reflow soldered between two solid tinned copper or nickel wires and potted in the head of passivated aluminum srew size M4.

PACKAGING

The thermistors are packed in cardboard boxes; the smallest packaging quantity is 100 units.

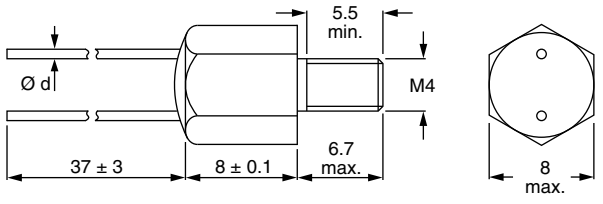
MARKING

The last 4 digits of the catalog number are printed on the stud in accordance with the information in Electrical Data and Ordering Information Table.

MOUNTING

By means of a washer and M4 nut supplied with the device or in a threaded screw hole. Applied torque shall not exceed 1.2 Nm. Leads to be soldered or crimped.

DIMENSIONS in millimeters



Component outline

QUICK REFERENCE DATA

PARAMETER	VALUE
Resistance value at 25 °C	1.0 kΩ to 470 kΩ
Tolerance on R_{25} - value	± 1 %, ± 2 %, ± 5 %
Tolerance on $B_{25/85}$ - value	± 0.5 % to ± 2.5 %
$B_{25/85}$ - value	3740K to 4570K
Maximum dissipation	500 mW
Dissipation factor (1)	≈ 23 mW/K
Thermal time constant (1)	≈ 7.5 s
Operating temperature range at:	
Zero dissipation	- 40 °C to + 100 °C
Maximum dissipation	0 °C to + 55 °C
Weight	≈ 1.5 g
Min. dielectric withstanding voltage between terminals and Al case	1500 V_{ac} (1 s)
Insulation resistance between terminals and Al case	min. 100 MΩ

Notes

(1) Measured with screw mounted on an aluminium heatsink of 100 cm^2, thickness 1.5 mm, in still air at T_{amb} = + 25 °C

- Other R_{25} values based on 640 0 series are available upon request
- Other tolerances on R_{25} are available upon request
- Insulated leads available upon request

ELECTRICAL DATA AND ORDERING INFORMATION

R_{25} (kΩ)	TOLERANCE ON R_{25}	$B_{25/85}$ - VALUE	LEADS DIAMETER Ø d (mm)	TCR (%/K)	12NC CODE	SAP MATERIAL NO. AND ORDERING CODE
1.0	± 5 %	3528K ± 0.5 %	0.6	- 3.87	2381 640 73102	NTCASCWE3102J
2.2	± 5 %	3977K ± 0.75 %	0.6	- 4.37	2381 640 73222	NTCASCWE3222J
4.7	± 5 %	3977K ± 0.75 %	0.6	- 4.37	2381 640 73472	NTCASCWE3472J
10	± 1 %	3977K ± 0.75 %	0.5	- 4.37	2381 640 75103	NTCASCWE3103F
10	± 2 %	3977K ± 0.75 %	0.5	- 4.37	2381 640 74103	NTCASCWE3103G
10	± 5 %	3977K ± 0.75 %	0.6	- 4.37	2381 640 73103	NTCASCWE3103J
12	± 5 %	3740K ± 1.5 %	0.6	- 4.10	2381 640 73123	NTCASCWE3123J
15	± 5 %	3740K ± 1.5 %	0.6	- 4.10	2381 640 73153	NTCASCWE3153J
47	± 5 %	4090K ± 1.5 %	0.6	- 4.46	2381 640 73473	NTCASCWE3473J
100	± 1 %	4190K ± 1.5 %	0.5	- 4.57	2381 640 75104	NTCASCWE3104F
100	± 2 %	4190K ± 1.5 %	0.5	- 4.57	2381 640 74104	NTCASCWE3104G
100	± 5 %	4190K ± 1.5 %	0.6	- 4.57	2381 640 73104	NTCASCWE3104J
150	± 5 %	4370K ± 2.5 %	0.6	- 4.75	2381 640 73154	NTCASCWE3154J
470	± 5 %	4570K ± 2 %	0.6	- 4.95	2381 640 73474	NTCASCWE3474J

Notes

- R_{25} - values, temperature coefficients and catalog numbers
- The thermistors have a 12-digit catalog number starting with 2381 640 7. The subsequent 4 digits indicate the resistance value and tolerance.

Disclaimer

All product specifications and data are subject to change without notice.

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