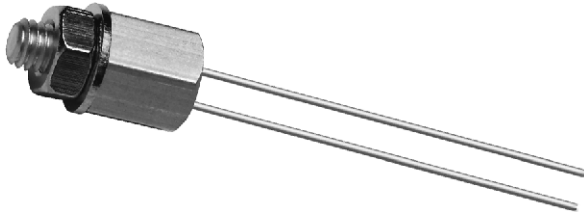


## NTC Thermistors, Screw Threaded Sensors



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 <sup>(1)</sup>	≈ 23 mW/K
Thermal time constant <sup>(1)</sup>	≈ 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 <sub>ac</sub> (1 s)
Insulation resistance between terminals and Al case	min. 100 MΩ

### Notes

- <sup>(1)</sup> Measured with screw mounted on an aluminium heatsink of 100 cm<sup>2</sup>, 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 $\varnothing d$ (mm)	TCR (%/K)	12 NC ORDERING CODE	SAP MATERIAL NO.
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	± 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.

### 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 screw size M4.

### PACKAGING

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

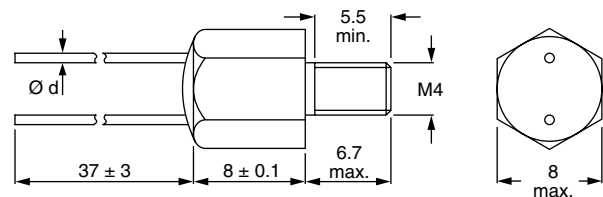
### MARKING

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



## Disclaimer

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

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