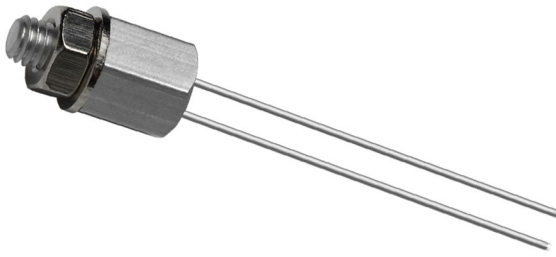


## NTC Thermistors, Screw Threaded Sensors



QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	1K to 470K	$\Omega$
Tolerance on $R_{25}$ -value	$\pm 1, \pm 2, \pm 5$	%
$B_{25/85}$ -value	3740 to 4570	K
Tolerance on $B_{25/85}$ -value	$\pm 0.5$ to $\pm 2.5$	%
Operating temperature range at: Zero dissipation	- 40 to + 100	$^{\circ}\text{C}$
Maximum power dissipation	0 to + 55	
Dissipation factor <sup>(1)</sup>	$\approx 23$	mW/K
Maximum power dissipation	500	mW
Thermal time constant <sup>(1)</sup>	$\approx 7.5$	s
Min. dielectric withstanding voltage between terminals and Al case	1500 (1 s)	$V_{AC}$
Insulation resistance between terminals and Al case	min. 100	$M\Omega$
Weight	$\approx 1.5$	g

**Notes**

- Other  $R_{25}$ -values and tolerances are available upon request
  - Insulated leads available upon request
- <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  $T_{amb} = + 25\text{ }^{\circ}\text{C}$

**FEATURES**

- Easy mounting with screw
- Rugged construction
- Material categorization:  
For definitions of compliance please see [www.vishay.com/doc?999912](http://www.vishay.com/doc?999912)


**RoHS**  
COMPLIANT

**APPLICATIONS**

- Temperature measurement, sensing and control
- Suitable for surface temperature 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.

**DESIGN IN SUPPORT**

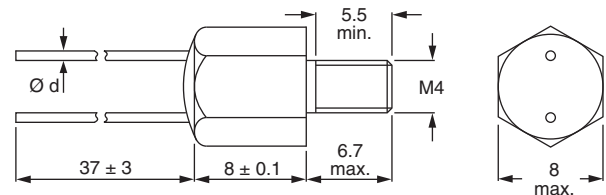
For complete Curve Computation, visit:  
[www.vishay.com/resistors-non-linear/curve-computation-list](http://www.vishay.com/resistors-non-linear/curve-computation-list)

**MARKING**

The last 4 digits of the 12NC code 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

ELECTRICAL DATA AND ORDERING INFORMATION						
$R_{25}$ (k $\Omega$ )	TOLERANCE ON $R_{25}$	$B_{25/85}$ -VALUE	LEADS DIAMETER $\varnothing d$ (mm)	TCR (%/K)	SAP MATERIAL NUMBER AND ORDERING CODE	OLD 12NC CODE
1.0	$\pm 5\%$	$3528K \pm 0.5\%$	0.6	- 3.87	NTCASCWE3102J	2381 640 73102
2.2	$\pm 5\%$	$3977K \pm 0.75\%$	0.6	- 4.37	NTCASCWE3222J	2381 640 73222
4.7	$\pm 1\%$	$3977K \pm 0.75\%$	0.5	- 4.37	NTCASCWE3472F	2381 640 75472
4.7	$\pm 2\%$	$3977K \pm 0.75\%$	0.5	- 4.37	NTCASCWE3472G	2381 640 74472
4.7	$\pm 5\%$	$3977K \pm 0.75\%$	0.6	- 4.37	NTCASCWE3472J	2381 640 73472
10	$\pm 1\%$	$3977K \pm 0.75\%$	0.5	- 4.37	NTCASCWE3103F	2381 640 75103
10	$\pm 2\%$	$3977K \pm 0.75\%$	0.5	- 4.37	NTCASCWE3103G	2381 640 74103
10	$\pm 5\%$	$3977K \pm 0.75\%$	0.6	- 4.37	NTCASCWE3103J	2381 640 73103
12	$\pm 5\%$	$3740K \pm 1.5\%$	0.6	- 4.10	NTCASCWE3123J	2381 640 73123
15	$\pm 5\%$	$3740K \pm 1.5\%$	0.6	- 4.10	NTCASCWE3153J	2381 640 73153
47	$\pm 5\%$	$4090K \pm 1.5\%$	0.6	- 4.46	NTCASCWE3473J	2381 640 73473
100	$\pm 1\%$	$4190K \pm 1.5\%$	0.5	- 4.57	NTCASCWE3104F	2381 640 75104
100	$\pm 2\%$	$4190K \pm 1.5\%$	0.5	- 4.57	NTCASCWE3104G	2381 640 74104
100	$\pm 5\%$	$4190K \pm 1.5\%$	0.6	- 4.57	NTCASCWE3104J	2381 640 73104
150	$\pm 5\%$	$4370K \pm 2.5\%$	0.6	- 4.75	NTCASCWE3154J	2381 640 73154
470	$\pm 5\%$	$4570K \pm 2\%$	0.6	- 4.95	NTCASCWE3474J	2381 640 73474



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## Material Category Policy

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**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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