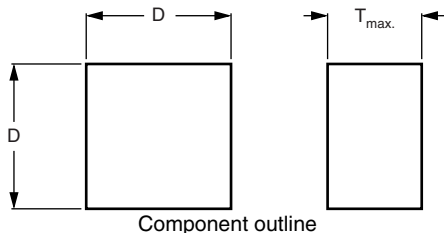


NTC Thermistors, Naked Chips



QUICK REFERENCE DATA	
PARAMETER	VALUE
Resistance value at 25 °C (R_{25})	2.2 k Ω to 470 k Ω
Tolerance on R_{25} - value	$\pm 1\%$; $\pm 2\%$; $\pm 3\%$; $\pm 5\%$
$B_{25/85}$ - value	3740K to 4570K
Tolerance on $B_{25/85}$ - value	$\pm 2.5\%$ to $\pm 0.75\%$
Operating temperature range: at zero dissipation (continuously) for short periods at maximum dissipation	- 40 °C to + 125 °C ≤ 150 °C 0 °C to + 55 °C
Climatic category	40/125/56
Weight	See Electrical Data and Ordering Information table

DIMENSIONS in millimeters



FEATURES

- High stability (tolerance on B-value between $\pm 2.5\%$ and $\pm 0.75\%$) over a long life
- Excellent price/performance ratio
- For mechanical fixing in a housing or soldering directly to 'non-standard' leads
- Old part number was 2322 640 0....
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC


RoHS
COMPLIANT

APPLICATIONS

- Temperature measurement, sensing and control

DESCRIPTION

These thermistors have a negative temperature coefficient. The device consists of a silver metallized square chip.

DESIGN-IN SUPPORT

For complete curve computation, visit:

www.vishay.com/thermistors/curve-computation-list/

PACKAGING

The naked chips are placed in sealed polythene bags and packed in cardboard boxes. The smallest packaging quantity is 5000 units.

MOUNTING

By reflow or wave soldering in any position or mechanical fixing.

The use of ultrasonic soldering is **not** recommended.

ELECTRICAL DATA AND ORDERING INFORMATION							
R_{25} (k Ω)	TCR (%/K)	D (mm)	T_{max} (mm)	$B_{25/85}$ VALUE (K)	TOL. ON $B_{25/85}$ (%)	12 NC ORDERING CODE 2381 640 0... ⁽¹⁾	SAP MATERIAL NO. NTCC100E4... ⁽²⁾
2.2	4.37	2.3 \pm 0.4	1.3	3977	± 0.75	*222	222*B
2.7	4.37	2.3 \pm 0.4		3977	± 0.75	*272	272*B
3.3	4.37	2.0 \pm 0.4		3977	± 0.75	*332	332*B
4.7	4.37	2.0 \pm 0.4		3977	± 0.75	*472	472*B
5.0	4.37	2.0 \pm 0.4		3977	± 0.75	*502	502*B
6.0	4.37	2.0 \pm 0.4		3977	± 0.75	*602	602*B
6.8	4.37	2.0 \pm 0.4		3977	± 0.75	*682	682*B
8.0	4.37	2.0 \pm 0.4		3977	± 0.75	*802	802*B
10	4.37	2.0 \pm 0.4		3977	± 0.75	*103	103*B
12	4.10	2.0 \pm 0.4		3740	± 2.0	*123	123*B
15	4.10	2.0 \pm 0.4		3740	± 2.0	*153	153*B
22	4.10	2.0 \pm 0.4		3740	± 2.0	*223	223*B
33	4.46	2.0 \pm 0.4		4090	± 1.5	*333	333*B
47	4.46	2.0 \pm 0.4		4090	± 1.5	*473	473*B
68	4.57	2.0 \pm 0.4		4190	± 1.5	*683	683*B
100	4.57	2.0 \pm 0.4		4190	± 1.5	*104	104*B
150	4.75	2.0 \pm 0.4		4370	± 2.5	*154	154*B
220	4.75	2.0 \pm 0.4		4370	± 2.5	*224	224*B
330	4.95	2.0 \pm 0.4		4570	± 1.5	*334	334*B
470	4.95	2.0 \pm 0.4		4570	± 1.5	*474	474*B

Notes

(1) Replace * in 12 NC by 3 for 5 %, 6 for 3 %, 4 for 2 % and 5 for 1 % tolerance on R_{25}

(2) Replace * in SAP part no by J for 5 %, H for 3 %, G for 2 % and F for 1 % tolerance on R_{25}



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