

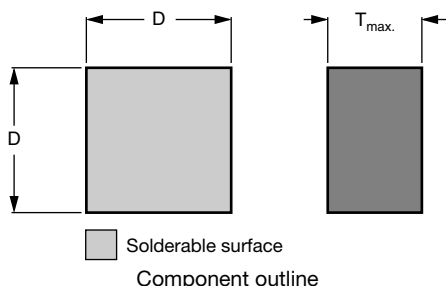
Leadless NTC Thermistor Dies



QUICK REFERENCE DATA

PARAMETER	VALUE	UNIT
Resistance value at 25 °C (R_{25})	2.2K to 470K	Ω
Tolerance on R_{25} -value	± 1 ; ± 2 ; ± 3 ; ± 5	%
$B_{25/85}$ -value	3740 to 4570	K
Tolerance on $B_{25/85}$ -value	± 0.75 to ± 2.5	%
Operating temperature range: at zero dissipation (continuously) for short periods	-40 to +125 ≤ 150	°C
Climatic category (LCT / UCT / days)	40 / 125 / 56	

DIMENSIONS in millimeters



FEATURES

- High stability (tolerance on B-value between ± 2.5 % and ± 0.75 %) over a long life
- Excellent price/performance ratio
- For mechanical fixing in a housing or soldering directly to 'non-standard' leads
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912



RoHS
 COMPLIANT
 HALOGEN
FREE

APPLICATIONS

- Temperature measurement, sensing, and control

DESCRIPTION

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

DESIGN-IN SUPPORT

For complete curve computation, visit:
www.vishay.com/thermistors/curve-computation-list/

PACKAGING

The leadless dies 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 in a housing. Soldering directly to "non-standard" leads. Not suitable for ultrasonic soldering or wire bonding.

ELECTRICAL DATA AND ORDERING INFORMATION

R_{25} (Ω)	R_{25} -TOL. (\pm %)	TCR ($\%$ /K)	$B_{25/85}$ (K)	$B_{25/85}$ -TOL. (\pm %)	D (mm)	T_{max} (mm)	SAP MATERIAL AND ORDERING NUMBER ⁽¹⁾
2200	1, 2, 3, 5	4.37	3977	0.75	2.3 ± 0.4	1.3	NTCC100E4222*B
2700	1, 2, 3, 5	4.37	3977	0.75	2.3 ± 0.4		NTCC100E4272*B
3300	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4332*B
4700	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4472*B
5000	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4502*B
6000	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4602*B
6800	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4682*B
8000	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4802*B
10 000	1, 2, 3, 5	4.37	3977	0.75	2.0 ± 0.4		NTCC100E4103*B
12 000	1, 2, 3, 5	4.10	3740	2.0	2.0 ± 0.4		NTCC100E4123*B
15 000	1, 2, 3, 5	4.10	3740	2.0	2.0 ± 0.4		NTCC100E4153*B
22 000	1, 2, 3, 5	4.10	3740	2.0	2.0 ± 0.4		NTCC100E4223*B
33 000	1, 2, 3, 5	4.46	4090	1.5	2.0 ± 0.4		NTCC100E4333*B
47 000	1, 2, 3, 5	4.46	4090	1.5	2.0 ± 0.4		NTCC100E4473*B
68 000	1, 2, 3, 5	4.57	4190	1.5	2.0 ± 0.4		NTCC100E4683*B
100 000	1, 2, 3, 5	4.57	4190	1.5	2.0 ± 0.4		NTCC100E4104*B
150 000	1, 2, 3, 5	4.75	4370	2.5	2.0 ± 0.4		NTCC100E4154*B
220 000	1, 2, 3, 5	4.75	4370	2.5	2.0 ± 0.4		NTCC100E4224*B
330 000	1, 2, 3, 5	4.95	4570	1.5	2.0 ± 0.4		NTCC100E4334*B
470 000	1, 2, 3, 5	4.95	4570	1.5	2.0 ± 0.4		NTCC100E4474*B

Note

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



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.