



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

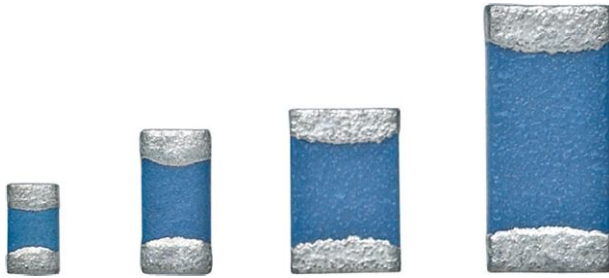
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NTC Thermistors, SMD 0402, 0603, 0805, 1206 Chip



FEATURES

- Extended resistance values available in standard sizes
- Wraparound Ni barrier terminations with 100 % Sn
- Allows design flexibility for use with hybrid circuitry
- High-density monolithic construction with glass overcoat
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

APPLICATIONS

Temperature sensing, protection and compensation in industrial, telecom and consumer applications.

Examples are:

- Battery chargers
- Power suppliers
- Office equipment
- LCD compensation
- In-car entertainment

DESIGN-IN SUPPORT

For complete curve computation please visit the “My Vishay NTC curve” at: www.vishay.com/thermistors/curve-computation-list/ or sent your part number to thermistor1@vishay.com to obtain a calculation spreadsheet.

QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance value at 25 °C	4.7K to 350K	Ω
Tolerance on R_{25} -value	± 1, ± 2, ± 3, ± 5, ± 10	%
$B_{25/75}$ -value	3477 to 4247	K
$B_{25/85}$ -value	3486 to 4261	K
Tolerance on $B_{25/85}$ - value, $B_{25/75}$ -value	± 3	%
Operating temperature range at zero power (intermittent)	-40 to +125 (150)	°C

NTHS PRODUCT DATA AND R_{25} RESISTANCE RANGE AVAILABILITY								
CURVE	$B_{25/75}$ (K)	$B_{25/85}$ (K)	TCR (%/K)	NTHS0402 (kΩ)	NTHS0603 (kΩ)	NTHS0805 (kΩ)	NTHS1206 (kΩ)	$R_{25} \pm$ TOL. AVAILABILITY
2	3477	3486	-3.84	10 to 12	6.8 to 12	4.7 to 10	6 to 10	3, 5, 10
11	3691	3715	-4.13	30 to 34	22 to 32	15 to 30	20 to 33	3, 5, 10
1	3964	3974	-4.39	68 to 100 ⁽¹⁾	50 to 100	33 to 78	38 to 100	1, 2, 3, 5, 10
5	3964	3974	-4.39	47 to 50	40 to 50	25 to 47	30 to 44	3, 5, 10
17	4064	4073	-4.50	250	150 to 220	100 to 200	100 to 220	3, 5, 10
4	4247	4262	-4.67	350	250 to 350	200 to 300	200 to 330	3, 5, 10
Maximum dissipation at 25 °C in mW				80	125	210	280	
Dissipation factor in mW/K				2.0	3.0	3.5	4.0	
Thermal time constant in s				5	8	10	13	

Note

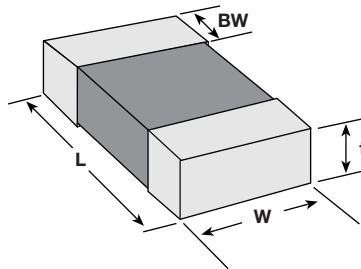
⁽¹⁾ Only R_{25} tolerance values ± 3 %, ± 5 %, and ± 10 % are available for NTHS0402N01N types.

STANDARD RESISTANCE VALUES at 25 °C in Ω									
4.7K	6.8K	12K	20K	30K	47K	68K	150K	220K	330K
5.0K	10K	15K	22K	33K	50K	100K	200K	250K	

Note

- Most popular and available values.

GLOBAL PART NUMBER INFORMATION																	
Global Part Numbering: NTHS1206N02N1002JE (preferred part number format)																	
N	T	H	S	1	2	0	6	N	0	2	N	1	0	0	2	J	E
GLOBAL MODEL	CONDUCTOR TYPE	CURVE	CHARACTERISTIC	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING											
NTHS0402 NTHS0603 NTHS0805 NTHS1206	Nickel barrier	01 02 04 05 11 17	N	1002 = 10K	F = ± 1 % G = ± 2 % H = ± 3 % J = ± 5 % K = ± 10 %	F = Lead (Pb)-free, bulk E = Lead (Pb)-free, T/R (2K pcs, full) U = Lead (Pb)-free, T/R (5K pcs, full)											

DIMENSIONS in inches (millimeters)


PART NUMBER	L	W	BW	t _{max.}
NTHS0402	0.040 ± 0.004 (1.02 ± 0.10)	0.022 ± 0.006 (0.56 ± 0.15)	0.010 ± 0.004 (0.25 ± 0.10)	0.028 (0.71)
NTHS0603	0.063 ± 0.008 (1.60 ± 0.20)	0.031 ± 0.008 (0.80 ± 0.20)	0.010 ± 0.006 (0.25 ± 0.15)	0.039 (1.00)
NTHS0805	0.079 ± 0.008 (2.01 ± 0.20)	0.049 ± 0.008 (1.25 ± 0.20)	0.012 ± 0.006 (0.30 ± 0.15)	0.057 (1.45)
NTHS1206	0.126 ± 0.008 (3.20 ± 0.20)	0.063 ± 0.008 (1.60 ± 0.20)	0.018 ± 0.008 (0.46 ± 0.20)	0.071 (1.80)

Note

- Thickness of the part is depending on the resistance value and curve



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