


Applications

- Temperature measurement and compensation in
 - hybrid circuits
 - data systems
 - telecom systems
 - automotive electronics

Features

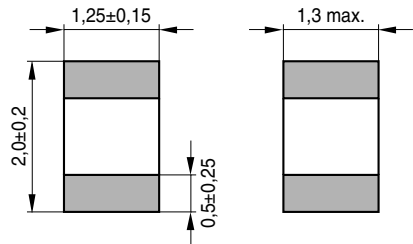
- Silver palladium termination (AgPd)
- Cost-effective
- Suitable for wave and reflow soldering

Options

Alternative resistance ratings and resistance tolerance < 5% available on request

Delivery mode

Blister tape, 180-mm reel, PU: 4000 pcs



Termination

TNT0397-7-E

Dimensions in mm
Approx. weight 13 mg

Climatic category (IEC 60068-1)

Max. power at 25 °C (on PCB)

Resistance tolerance

Rated temperature

B value tolerance

Dissipation factor (on PCB)

Thermal cooling time constant (on PCB)

Heat capacity

P_{25}

$\Delta R_N/R_N$

T_N

$\Delta B/B$

$\delta_{th}^{(1)}$

$\tau_c^{(1)}$

$C_{th}^{(1)}$

55/125/21

210

± 5 %, ± 10 %, ± 20 %

25

± 3 %

approx. 3,5

approx. 10

approx. 35

mW

°C

mW/K

s

mJ/K

R_{25}	No. of R/T characteristic	$B_{25/50}$	$B_{25/85}$	$B_{25/100}$	Ordering code
Ω		K	K	K	
220	3207	3060	3090	3100	B57620C0221+062
330	3204	3190	3250	3250	B57620C0331+062
470	3205	3270	3290	3300	B57620C0471+062
680	3206	3420	3440	3450	B57620C0681+062
1 k	3206	3420	3440	3450	B57620C0102+062
2,2 k	1304	3250	3280	3300	B57620C0222+062
4,7 k	1010	3470	3510	3530	B57620C0472+962

+: J for $\Delta R_N/R_N = \pm 5\%$

K for $\Delta R_N/R_N = \pm 10\%$

M for $\Delta R_N/R_N = \pm 20\%$

1) Depends on mounting situation



R_{25}	No. of R/T characteristic	$B_{25/50}$	$B_{25/85}$	$B_{25/100}$	Ordering code
Ω		K	K	K	
10 k	1011	3660	3730	3730	B57620C0103+062
22 k	2003	3930	3960	3980	B57620C0223+062
47 k	2101	4030	4080	4100	B57620C0473+062
100 k	2903	4120	4190	4200	B57620C0104+162
220 k	2904	4230	4280	4300	B57620C0224+062

+: J for $\Delta R_N/R_N = \pm 5\%$

K for $\Delta R_N/R_N = \pm 10\%$

M for $\Delta R_N/R_N = \pm 20\%$

www.DataSheet4U.com

Reliability data

SMD NTC thermistors are tested in accordance with IEC 60068. The parts are mounted on a standardized PCB in accordance with IEC 60539-1.

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typical)	Remarks
Storage in dry heat	IEC 60068-2-2 JIS C 0021	Storage at upper category temperature $T: (125 \pm 2)^\circ\text{C}$ $t: 1000\text{ h}$	< 3 %/ < 6 % ¹⁾	
Storage in damp heat, steady state	IEC 60068-2-3 JIS C 0022	Temperature of air: $(40 \pm 2)^\circ\text{C}$ Relative humidity of air: $(93 +2/-3)\%$ Duration: 21 days	< 3 %	No visible damage
Rapid temperature cycling	IEC 60068-2-14 JIS C 0025	Lower test temperature: -55°C Upper test temperature: 125°C Number of cycles: 10	< 3 %	
Endurance		P_{max} : 210 mW $T: (65 \pm 2)^\circ\text{C}$ $t: 1000\text{ h}$	< 5 %	
Solderability	IEC 60068-2-58 JIS C 0054	Solderability: $(215 \pm 3)^\circ\text{C} / (3 \pm 0,3)\text{ s}$ $(235 \pm 5)^\circ\text{C} / (2 \pm 0,2)\text{ s}$ Resistance to soldering heat: $(260 \pm 5)^\circ\text{C} / (10 \pm 1)\text{ s}$		95 % of terminations wetted
Resistance drift after soldering		Reflow soldering profile Wave soldering profile	< 5 %	

1) The higher value applies to 220 Ω –1 k Ω types.

Herausgegeben von EPCOS AG

Unternehmenskommunikation, Postfach 80 17 09, 81617 München, DEUTSCHLAND

☎ ++49 89 636 09, FAX (0 89) 636-2 26 89

© EPCOS AG 2002. Vervielfältigung, Veröffentlichung, Verbreitung und Verwertung dieser Broschüre und ihres Inhalts ohne ausdrückliche Genehmigung der EPCOS AG nicht gestattet.

Bestellungen unterliegen den vom ZVEI empfohlenen Allgemeinen Lieferbedingungen für Erzeugnisse und Leistungen der Elektroindustrie, soweit nichts anderes vereinbart wird.

Diese Broschüre ersetzt die vorige Ausgabe.

Fragen über Technik, Preise und Liefermöglichkeiten richten Sie bitte an den Ihnen nächstgelegenen Vertrieb der EPCOS AG oder an unsere Vertriebsgesellschaften im Ausland. Bauelemente können aufgrund technischer Erfordernisse Gefahrstoffe enthalten. Auskünfte darüber bitten wir unter Angabe des betreffenden Typs ebenfalls über die zuständige Vertriebsgesellschaft einzuholen.

Published by EPCOS AG

Corporate Communications, P.O. Box 80 17 09, 81617 Munich, GERMANY

☎ ++49 89 636 09, FAX (0 89) 636-2 26 89

© EPCOS AG 2002. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.