



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Applications

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

Features

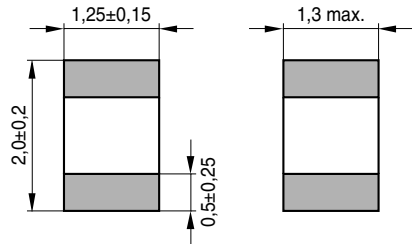
- Silver palladium termination (AgPd)
- Cost-effective
- Suitable for wave and reflow soldering

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) | | 55/125/21 | |
| Max. power at 25 °C (on PCB) | P_{25} | 210 | mW |
| Resistance tolerance | $\Delta R_N/R_N$ | $\pm 5\%, \pm 10\%, \pm 20\%$ | |
| Rated temperature | T_N | 25 | °C |
| B value tolerance | $\Delta B/B$ | $\pm 3\%$ | |
| Dissipation factor (on PCB) | $\delta_{th}^{(1)}$ | approx. 3,5 | mW/K |
| Thermal cooling time constant (on PCB) | $\tau_c^{(1)}$ | approx. 10 | s |
| Heat capacity | $C_{th}^{(1)}$ | approx. 35 | 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 $\Delta R_N/R_N = \pm 20\%$

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.