



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!



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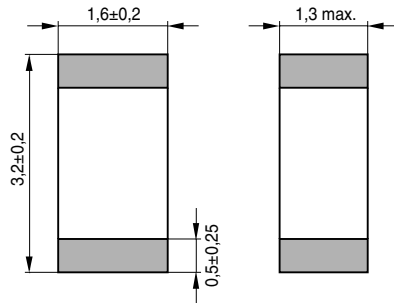



Applications

- 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



■ Termination

TNT0398-F

Options

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

Dimensions in mm/Approx. weight 18 mg

Delivery mode

Blister tape, 180-mm reel, PU: 4000 or 2000 pcs, depending on chip thickness

Climatic category (IEC 60068-1)		55/125/21	
Max. power at 25 °C (on PCB)	P_{25}	300	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. 5	mW/K
Thermal cooling time constant (on PCB)	$\tau_c^{(1)}$	approx. 10	s
Heat capacity	$C_{th}^{(1)}$	approx. 50	mJ/K

R_{25}	No. of R/T characteristic	$B_{25/50}$	$B_{25/85}$	$B_{25/100}$	Ordering code
Ω		K	K	K	
2,2 k	1308	3010	3040	3060	B57621C0222+062
3,3 k	1309	3430	3500	3520	B57621C0332+062
4,7 k	1309	3430	3500	3520	B57621C0472+062
10 k	1010	3470	3510	3530	B57621C0103+062
15 k	1008	3480	3550	3560	B57621C0153+062
22 k	1008	3480	3550	3560	B57621C0223+062
33 k	2003	3930	3960	3980	B57621C0333+062
47 k	2001	3860	3890	3920	B57621C0473+062
68 k	2001	3860	3890	3920	B57621C0683+062

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

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

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

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	
100 k	4901	3870	3930	3950	B57621C0104+062
150 k	2903	4120	4190	4200	B57621C0154+162
220 k	2903	4120	4190	4200	B57621C0224+062
330 k	1014	4090	4210	4250	B57621C0334+062
470 k	1014	4090	4210	4250	B57621C0474+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 %	
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} : 300 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 %	

Herausgegeben von EPCOS AG

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This brochure replaces the previous edition.

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