



Applications

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

Features

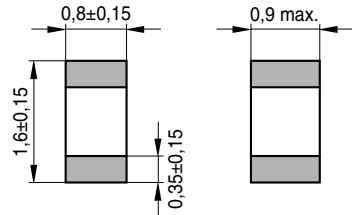
- Silver palladium termination (AgPd)
- Cost-effective
- Suitable for wave and reflow soldering

Options

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

Delivery mode

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



Termination

TNT0396-Y

Dimensions in mm
Approx. weight 6 mg

Climatic category (IEC 60068-1)		55/125/21	
Max. power at 25 °C (on PCB)	P_{25}	180	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	mW/K
Thermal cooling time constant (on PCB)	$\tau_c^{(1)}$	approx. 4	s
Heat capacity	$C_{th}^{(1)}$	approx. 12	mJ/K

R_{25}	No. of R/T characteristic	$B_{25/50}$	$B_{25/85}$	$B_{25/100}$	Ordering code
Ω		K	K	K	
10 k	1010	3470	3510	3530	B57619C0103+060
22 k	1008	3480	3550	3560	B57619C0223+060
47 k	2001	3860	3890	3920	B57619C0473+060

- +: 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



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: $(93 \pm 2/-3) \%$ Duration: 21 days	< 3 %	No visible damage
Rapid temperature cycling	IEC 60068-2-14 JIS C 0025	Lower test temperature: $-55 ^\circ\text{C}$ Upper test temperature: $125 ^\circ\text{C}$ Number of cycles: 10	< 3 %	
Endurance		P_{max} : 180 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 %	

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