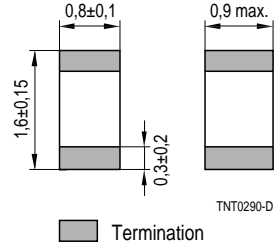


Applications

- Temperature compensation
- Hybrid circuits
- Data systems
- Telecom systems
- Automotive electronics
- Crystal oscillators
- LC displays



Features

- Small dimensions, EIA size 0603
- Silver palladium terminations
- Cost-effective
- Suitable for automatic placement
- Suitable for wave and reflow soldering
- Available on tape (PU: 4000 pcs)

Dimensions in mm
Approx. weight 6 mg

Options

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

Climatic category (IEC 68-1)		55/125/21	
Max. power at 25 °C (on PCB)	P_{25}	180	mW
Resistance tolerance	$\Delta R/R_N$	$\pm 5\%$, $\pm 10\%$, $\pm 20\%$	
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

Type	R_{25} Ω	No. of R/T characteristic	$B_{25/100}$ K	Ordering code
C 619/10 k/+	10 k	1010	3530	B57619-C103-+60
C 619/22 k/+	22 k	1008	3560	B57619-C223-+60
C 619/47 k/+	47 k	2001	3920	B57619-C473-+60

- + : J for $\Delta R/R_N = \pm 5\%$
- K for $\Delta R/R_N = \pm 10\%$
- M for $\Delta R/R_N = \pm 20\%$

1) Depends on mounting situation

Reliability data

Tested on standardized PCB in accordance with IEC 60068-2-21

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typical)	Remarks
Storage in dry heat	IEC 60068-2-2	Storage at upper category temperature T: 125 °C t: 1000 h	< 3 %	
Storage in damp heat, steady state	IEC 60068-2-3	Temperature of air: 40 °C Relative humidity of air: 93 % Duration: 21 days	< 3 %	No visible damage
Rapid temperature cycling	IEC 60068-2-14	Lower test temperature: - 55 °C Upper test temperature: 125 °C Number of cycles: 10	< 3 %	
Endurance		P_{max} : 180 mW Duration: 1000 h	< 5 %	
Solderability	IEC 60068-2-58	Solderability: 215 °C/4 s 235 °C/2 s Resistance to soldering heat: 260 °C/10 s	< 5 %	95 % of terminations wetted
Robustness of terminations		Bending of carrier (2 mm bending) Refer also to page 120	< 5 %	No visible damage