

**Applications**

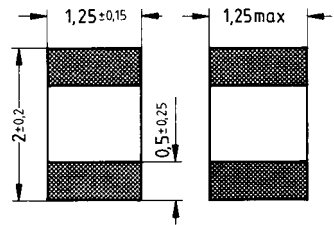
- Temperature compensation
- Hybrid circuits
- Data systems
- Telecom systems
- Automotive electronics
- Crystal oscillators
- LC displays

**Features**

- Small dimensions, EIA size 0805
- Silver palladium terminations
- Cost-effective
- Suitable for automatic placement
- Suitable for wave and reflow soldering
- Available on tape (PU: 4000 pcs)

**Options**

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



Termination TNT0033-H

Dimensions in mm  
Approx. weight 13 mg

Climatic category (IEC 68-1)		55/125/21	
Max. power at 25 °C (on PCB)	$P_{25}$	210	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. 3,5	mW/K
Thermal cooling time constant (on PCB)	$\tau_c^{(1)}$	approx. 10	s
Heat capacity	$C_{th}^{(1)}$	approx. 35	mJ/K

Type	$R_{25}$ Ω	No. of R/T characteristic	$B_{25/100}$ K	Ordering code
C 620/220/+	220	3207	3100	B57620-C221-+962
C 620/330/+	330	3204	3250	B57620-C331-+962
C 620/470/+	470	3204	3250	B57620-C471-+962
C 620/680/+	680	3206	3450	B57620-C681-+962
C 620/1 k/+	1 k	3206	3450	B57620-C102-+962
C 620/2,2 k/+	2,2 k	1304	3300	B57620-C222-+62
C 620/4,7 k/+	4,7 k	1010	3530	B57620-C472-+962

- + : 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

Type	$R_{25}$ $\Omega$	No. of R/T characteristic	$B_{25/100}$ K	Ordering code
C 620/10 k/+	10 k	1011	3730	B57620-C103-+62
C 620/22 k/+	22 k	2003	3980	B57620-C223-+62
C 620/47 k/+	47 k	2101	4100	B57620-C473-+62
C 620/100 k/+	100 k	2903	4200	B57620-C104-+162
C 620/220 k/+	220 k	2904	4300	B57620-C224-+62

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

### 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 %/ < 6 % <sup>1)</sup>	
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		$P_{max}$ : 210 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 <a href="#">page 120</a>	< 5 %	No visible damage

1) The higher value applies to 220  $\Omega$ -1 k $\Omega$  types.