

Applications

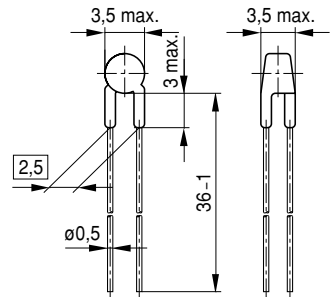
- Temperature compensation
- Temperature measurement
- Temperature control

Features

- Wide resistance range
- Cost-effective
- Lacquer-coated thermistor disk
- Leads: copper-clad Fe wire, tinned
- Marked with resistance and tolerance

Delivery mode

Bulk (standard),
cardboard tape, reeled or in Ammo pack



TNT0390-J

Dimensions in mm
Approx. weight 0,2 g

Climatic category (IEC 60068-1)		55/125/21	
Max. power at 25 °C	P_{25}	200	mW
Resistance tolerance	$\Delta R_N/R_N$	$\pm 5\%, \pm 10\%$	
Rated temperature	T_N	25	°C
B value tolerance	$\Delta B/B$	$\pm 3\%$	
Dissipation factor (in air)	δ_{th}	approx. 3,5	mW/K
Thermal cooling time constant (in air)	τ_c	approx. 12	s
Heat capacity	C_{th}	approx. 40	mJ/K

R_{25}	No. of R/T characteristic	$B_{25/100}$	Ordering code
Ω		K	
1 k	1009	3930	B57891M0102+000
1,5 k	1008	3560	B57891M0152+000
2,2 k	1013	3900	B57891M0222+000
3,3 k	2003	3980	B57891M0332+000
4,7 k	2003	3980	B57891M0472+000
6,8 k	2003	3980	B57891M0682+000
10 k	4901	3950	B57891M0103+000
15 k	2004	4100	B57891M0153+000
22 k	2904	4300	B57891M0223+000
33 k	2904	4300	B57891M0333+000
47 k	4012	4355	B57891M0473+001
68 k	4012	4355	B57891M0683+001

Temperature Measurement	B57891
Leaded Disks	M 891

R_{25}	No. of R/T characteristic	$B_{25/100}$	Ordering code
Ω		K	
100 k	4003	4450	B57891M0104+000
150 k	2005	4600	B57891M0154+000
220 k	2005	4600	B57891M0224+000
330 k	2007	4830	B57891M0334+000
470 k	2006	5000	B57891M0474+000

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

Reliability data

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typical)	Remarks
Storage in dry heat	IEC 60068-2-2	Storage at upper category temperature $T: 125\text{ }^\circ\text{C}$ $t: 1000\text{ h}$	< 3 %	No visible damage
Storage in damp heat, steady state	IEC 60068-2-3	Temperature of air: $40\text{ }^\circ\text{C}$ Relative humidity of air: 93 % Duration: 21 days	< 2 %	No visible damage
Rapid temperature cycling	IEC 60068-2-14	Lower test temperature: $-55\text{ }^\circ\text{C}$ Upper test temperature: $125\text{ }^\circ\text{C}$ Number of cycles: 100	< 2 %	No visible damage
Endurance		$P_{\max}: 200\text{ mW}$ $t: 1000\text{ h}$	< 3 %	No visible damage
Long-term stability (empirical value)		Temperature: $125\text{ }^\circ\text{C}$ $t: 10\,000\text{ h}$	< 5 %	No visible damage