

**Temperature Measurement**

**B57871**

**Leaded Disks**

**S 871**

**Applications**

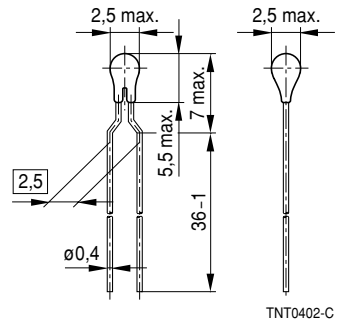
- Temperature measurement

**Features**

- High measuring accuracy
- Cost-effective
- Rugged design, epoxy resin encapsulation
- Tinned copper leads
- Lead spacing 2,5 mm

**Delivery mode**

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



Dimensions in mm  
Approx. weight 120 mg

Climatic category (IEC 60068-1)		55/155/56	
Max. power at 25 °C	$P_{25}$	60	mW
Resistance tolerance	$\Delta R_N/R_N$	$\pm 1 \%, \pm 3 \%, \pm 5 \%$	
Rated temperature	$T_N$	25	°C
B value tolerance	$\Delta B/B$	$\pm 1 \%$	
Dissipation factor (in air)	$\delta_{th}$	approx. 3,8	mW/K
Thermal cooling time constant (in air)	$\tau_c$	approx. 7,5	s
Heat capacity	$C_{th}$	approx. 28,5	mJ/K

$R_{25}$	No. of R/T characteristic	$B_{25/100}$	Ordering code
$\Omega$		K	
2,1 k	1008	3560	B57871S0212+000
10 k	8016	3988	B57871S0103+001
10 k	2908	3460	B57871S0103+002
10 k	2001	3920	B57871S0103+003
12 k	2901	3760	B57871S0123+000
30 k	8018	3964	B57871S0303+000

+: F for  $\Delta R_N/R_N = \pm 1 \%$   
H for  $\Delta R_N/R_N = \pm 3 \%$   
J for  $\Delta R_N/R_N = \pm 5 \%$

**Reliability data**

Test	Standard	Test conditions	$\Delta R_{25}/R_{25}$ (typ.)	Remarks
Storage in dry heat	IEC 60068-2-2	Storage at upper category temperature $T$ : 155 °C $t$ : 1000 h	< 2 %	No visible damage
Storage in damp heat, steady state	IEC 60068-2-3	Temperature of air: 40 °C Relative humidity of air: 93 % Duration: 56 days	< 1 %	No visible damage
Rapid temperature cycling	IEC 60068-2-14	Lower test temperature: – 55 °C Upper test temperature: 155 °C Number of cycles: 100	< 2 %	No visible damage
Endurance		$P_{\max}$ : 450 mW $t$ : 1000 h	< 3 %	No visible damage
Long-term stability (empirical value)		Temperature: 70 °C $t$ : 10 000 h	< 3 %	No visible damage

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