

**Applications**

- Heating systems
- Industrial electronics
- Automotive electronics

**Features**

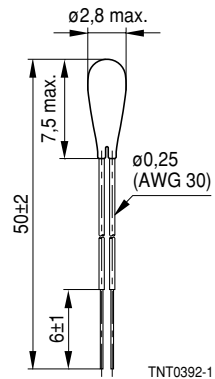
- Improved resistance to humidity
- Fast response
- High measuring accuracy
- Different tolerances available
- Epoxy resin encapsulation
- Insulated leads of silver-plated nickel wire, AWG 30

**Options**

Non-standard lead lengths

**Delivery mode**

Bulk



Dimensions in mm  
Approx. weight 60 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. 1,7	mW/K
Thermal cooling time constant (in air)	$\tau_c$	approx. 21	s
Heat capacity	$C_{th}$	approx. 36	mJ/K

$R_{25}$	No. of R/T characteristic	$B_{25/100}$	Ordering code
$\Omega$		K	
2,8 k	8016	3988	B57862S0282+040
5 k	8016	3988	B57862S0502+040
10 k	8016	3988	B57862S0103+040

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

**Note**

The type series S 862 has a specially designed insulation (coating, wire coating) to withstand the immersion test in water of 1000 h/25 °C. Therefore these sensors must be protected to avoid any damage of the insulation material during handling and in the application.

**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 $T$ : 155 °C $t$ : 1000 h	< 1 %	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	< 1 %	No visible damage
Immersion test		Test voltage 2,7 Vdc on NTC over protective resistor, sensors immersed into water, ambient temperature (25 °C), voltage switched on 5 h switched off 1 h. $t$ : 1000 h	< 2 %	No visible damage
Long-term stability (empirical value)		Temperature: 70 °C $t$ : 10 000 h	< 2 %	No visible damage

**Herausgegeben von EPCOS AG**

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