

## NTC THERMISTORS

low resistance range

### Features

- Cost effective range with low resistance values at 25 °C

TEMPERATURE SENSING AND CONTROL  
TEMPERATURE COMPENSATION

### QUICK REFERENCE DATA

Resistance value at + 25 °C	3.3 Ω to 68 Ω
B <sub>25/85</sub> value	2675 to 3975 K
Maximum dissipation	0.5 W
Dissipation factor	8.5 mW/K
Thermal time constant	17 s approx.
Operating temperature range at zero power	-25 to + 125 °C
at maximum power	0 to + 55 °C

### APPLICATION

Temperature compensation and temperature sensing.

### DESCRIPTION

The thermistor has a negative temperature coefficient, it consists of a disc with two tinned copper wires. It is grey lacquered and colour coded, but not insulated.

### MECHANICAL DATA

#### Outlines

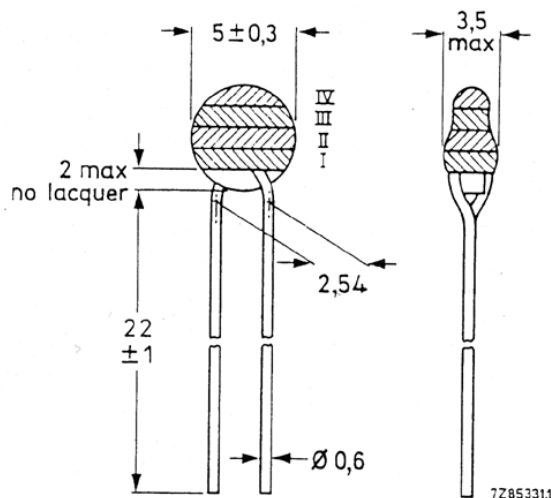


Fig.1 Component outline.

### PACKAGING

500 thermistors in a cardboard box. They can be supplied on tape on request.

**Marking**

The thermistors are marked with three or four colour bands in accordance with Fig. 1 and Table 1.

**Mass**

0.25 g approximately.

**Mounting**

In any position by soldering.

**Robustness of terminations**

Tensile strength	10 N
Bending	5 N

**Soldering**

Solderability	max. 240 °C, max. 4 s
Resistance to heat	max. 265 °C, max. 11 s

**Impact**

Free fall	1 m
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**Flammability**

Not inflammable in accordance with IEC as described by TC50 (1979), needle flame.

**Resistance to solvents**

In accordance with IEC 68-2-45, resistant to R113 at  $T_{amb}$ .

**ELECTRICAL DATA**

Unless otherwise specified, measured in accordance with IEC publication 539.

Resistance at 25 °C	see Table 1
B <sub>25/85</sub> values	see Table 1
Temperature coefficient	see Table 1
Maximum dissipation*	0.5 W
Dissipation factor*	8.5 mW/K approx.
Thermal time constant*	17 s approx.
Operating temperature range	
at zero power	-25 to + 125 °C
at maximum power, see Fig. 2	0 to + 55 °C

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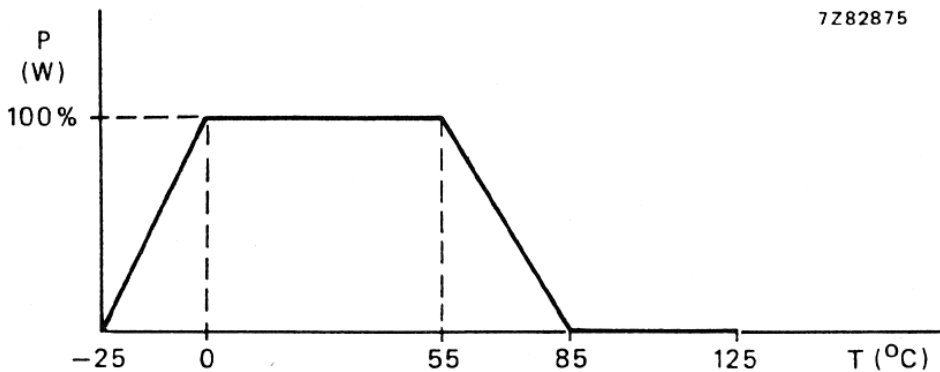


Fig. 2 Derating curve.

\* Measured in the measuring set described in the French norm NF C93-271, and clamped at 10 mm from the body.

Table 1 Catalogue number 2322 642 6....

suffix of catalogue number	R <sub>25</sub>	B <sub>25/85</sub>	temperature coefficient	colour code (see Marking)			
	Ω	± 5% K	%/K	I	II	III	* IV
.338	3,3	2675	-3,0	orange	orange	gold	
.478	4,7	2750	-3,1	yellow	violet	gold	
.688	6,8	2800	-3,2	blue	grey	gold	
.109	10	2875	-3,2	brown	black	black	
.159	15	2950	-3,3	brown	green	black	
.229	22	3025	-3,4	red	red	black	
.339	33	3100	-3,5	orange	orange	black	
.479	47	3150	-3,5	yellow	violet	black	
.689	68	3225	-3,6	blue	grey	black	

\* Replace dot in catalogue number (9th digit) by:  
 2 for a tolerance of 10% on R<sub>25</sub>, band IV is silver.  
 3 for a tolerance of 5% on R<sub>25</sub>, band IV is gold.