NTC THERMISTORS

disc

QUICK REFERENCE DATA

Resistance value at +25 °C	4 to 1300 Ω
$B_{25/85}$-value	2800 to 5450 K
Maximum dissipation	1 W
Dissipation factor	10 mW/K
Thermal time constant	60 s approx.
Operating temperature range	
at zero power	−25 to +125 °C
at maximum power	0 to +55 °C

APPLICATION

General purpose.

DESCRIPTION

Disc thermistor with negative temperature coefficient with two tinned copper wires. It is not lacquered, not insulated and has a colour code.

MECHANICAL DATA

Outlines

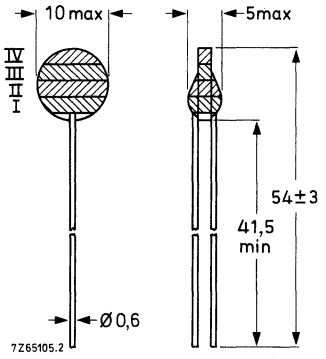


Fig. 1.

Marking (see Fig. 1)

The thermistors are marked with three colour bands showing their resistance value (R_{25}) in code as indicated in the table. Thermistors with a tolerance on R_{25} of 10% have a fourth band in silver.

Mass

1,0 to 1,3 g

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. 240 °C, max. 4 s

PACKAGING

250 thermistors in a cardboard box.

ELECTRICAL DATA

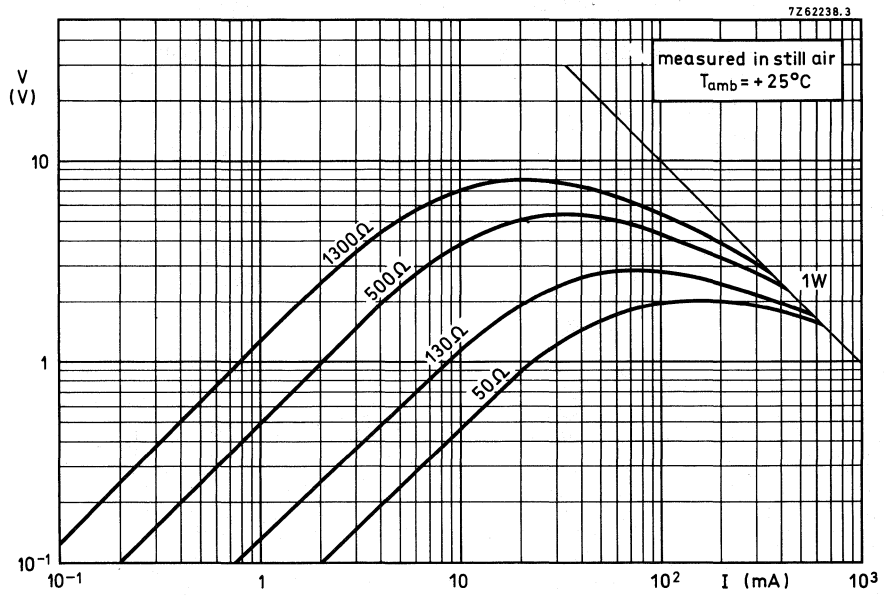
Maximum dissipation *	1 W
Dissipation factor *	10 mW/K approx.
Thermal time constant *	60 s approx.
Heat capacity *	0,6 J/K approx.
Operating temperature	
at zero power	−25 to +125 °C
at maximum power	0 to +55 °C

See further Table 1.

* Measurements made in still air, between two phosphor-bronze wires (ϕ 1,3 mm).

Table 1 Catalogue numbers 2322 610 1.....

suffix of catalogue number		R_{25}	$B_{25/85}$ ± 5%	temperature coefficient	colour code		
tol. ± 10%	tol. ± 20%	Ω	K	%/K	I	II	III
2408	1408	4	2800	−3,15	yellow	black	gold
2808	1808	8	2900	−3,25	grey	black	gold
2159	1159	15	3125	−3,40	brown	green	black
2339	1339	33	3250	−3,65	orange	orange	black
2509	1509	50	3300	−3,70	green	black	black
2131	1131	130	4600	−5,15	brown	orange	brown
2501	1501	500	5200	−5,85	green	black	brown
2132	1132	1300	5450	−6,15	brown	orange	red



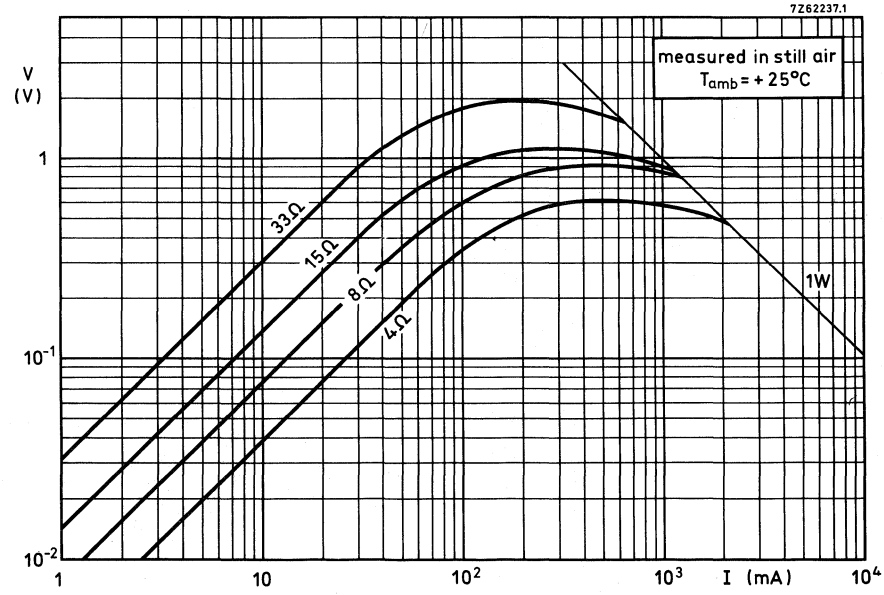


Fig. 2a and b Typical voltage/current characteristics.