

NTC THERMISTORS
higher power range

SURGE CURRENT LIMITING

Features

- large variety of products
- high cold resistance - negligible resistance in continuous current condition

QUICK REFERENCE DATA

Resistance value at 25 °C	2.5 Ω to 20 Ω
B _{25/85} value	2950 to 3600 K
Maximum current (RMS)	2.2 to 15 A
Operating temperature range	
at zero power	-25 to 155 °C
at maximum current	0 to 55 °C

APPLICATION

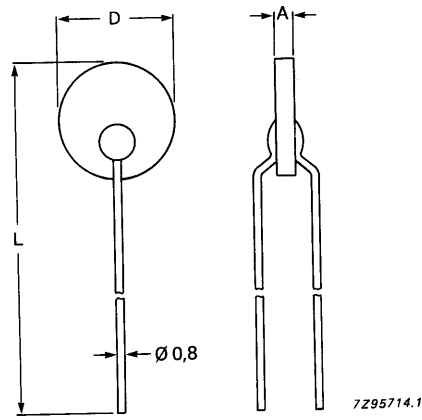
For limiting inrush current surges, preventing the blowing of fuses, provision of soft start of motors and switch protection.

DESCRIPTION

The thermistor has a negative temperature coefficient. It consists of a disc with two tinned copper wires. The thermistor body may be lacquered, depending on type (see Fig.1).

MECHANICAL DATA

Outlines



- Non-lacquered types
- | | |
|----------------|----------------|
| 2322 644 90005 | 2322 644 90013 |
| 2322 644 90008 | 2322 644 90025 |

For dimensions A and D, refer to Table 1.

Fig.1 Outline of components.

MECHANICAL DATA (continued)

Marking: none

Mass: see Table 1

Mounting: in any position by soldering

Robustness of terminations

Tensile strength	10 N
Bending	5 N

Soldering

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

Impact

Free fall	1 m
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Inflammability

The thermistors are non-flammable, in accordance with IEC Publication 695-2-2 (1980, needle flame)

PACKING

The thermistors are packed in cardboard boxes; the smallest packing quantities per type are shown in Table 1.

ELECTRICAL DATA

Unless otherwise specified, all measurements are in accordance with IEC Publication 539.

Operating temperature range

at zero power	−25 to 155 °C
at maximum power	0 to 55 °C

Table 1 Electrical data

catalogue number 2322 644	R ₂₅ value ± 25% Ω	tolerance %	δ approx. mW/K	τ approx. s	I _{max} (RMS) A	R value at I _{max} approx. Ω	mass approx. grams	D _{max} mm	A mm	L mm	temp. coeff. %/K	B _{25/85} value approx. K	smallest packing quantity
90005	≥ 15	—	17	148	2.2	≤ 1		16	4 ± 1	59 ± 3	—3.75	3350	100
90008	20	25			5		7.5	23.8	4 ± 1	62 ± 3	—4	3600	25
90013	20	25			6		7.5	23.8	4 ± 1	62 ± 3	—3.9	3450	25
90025	20	25			5		7.5	23.8	3.5 ± 1	60 ± 2	—4	3600	25

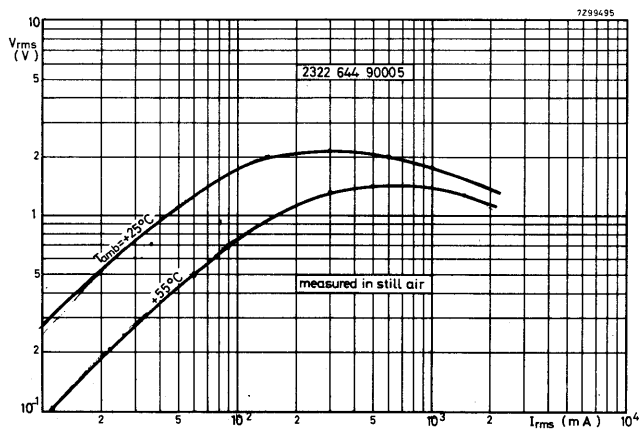


Fig.2 Typical voltage/current characteristics, type 90005; measured in still air at 25 °C.

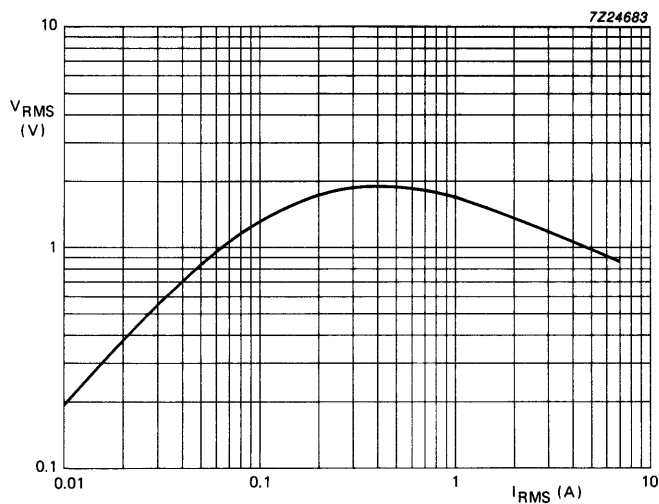


Fig.3 Typical voltage/current characteristics, type 90008; measured in still air at 25 °C.

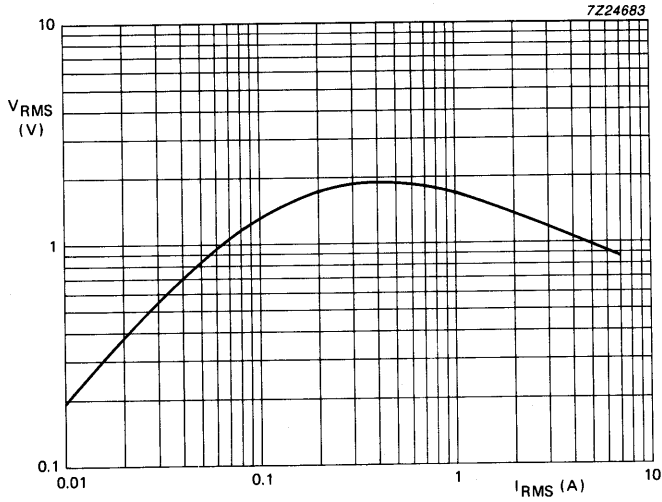


Fig.4 Typical voltage/current characteristics, type 90025; measured in still air at 25 °C.