

NTC Thermistors, Glass Encapsulated Miniature Bead



QUICK REFERENCE DATA

PARAMETER	VALUE
Resistance value at 25 °C	1 kΩ to 1 MΩ
Tolerance on R ₂₅ -value	±5%; ±10%
R _{25/85} -value	2075 to 4100 K
Tolerance on R _{25/85} -value	±5%
Maximum dissipation at 55 °C	100 mW
Response time; note 1	≈0.5 s
Operating temperature range: at zero dissipation	−55 to +200 °C
Mass	≈33 mg

Note

1. Response time in silicone oil MS200/50. This is the time needed for the sensor to reach 63.2% of the total temperature difference when subjected to a temperature change from 25 °C in air to 85 °C in oil.

FEATURES

- Small diameter
- Quick response to changes in temperature
- Very high long term stability
- High temperature operation

APPLICATIONS

Temperature measurement, level and flow sensing.

Bead thermistor with negative temperature coefficient, having two solid platinum-iridium leads in axial or radial configuration. The device is non-flammable.

MOUNTING

Spot weld the leads to conducting wires or other supports.

PACKAGING

The thermistors are packed in cardboard boxes; the smallest packaging quantity is 100 units.

ELECTRICAL DATA AND ORDERING INFORMATION

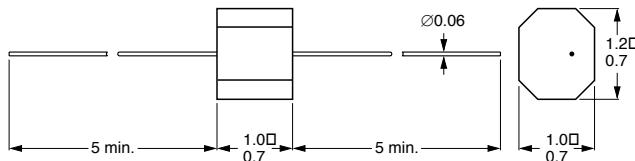
R ₂₅ (kΩ)	B _{25/85} -VALUE	TC (%/K)	CATALOG NUMBER 2322 633			
			AXIAL LEADS		RADIAL LEADS	
			R ₂₅ ±5%	R ₂₅ ±10%	R ₂₅ ±5%	R ₂₅ ±10%
1	2075 K ±5%	−2.3	03102	02102	13102	12102
2.2	2285 K ±5%	−2.6	03222	02222	13222	12222
4.7	2485 K ±5%	−2.8	03472	02472	13472	12472
10	3750 K ±5%	−4.2	03103	02103	13103	12103
22	3560 K ±5%	−4.0	03223	02223	13223	12223
47	3750 K ±5%	−4.2	03473	02473	13473	12473
100	3900 K ±5%	−4.4	03104	02104	13104	12104
220	3860 K ±5%	−4.3	03224	02224	13224	12224
470	3950 K ±5%	−4.5	03474	02474	13474	12474
1000	4100 K ±5%	−4.6	03105	02105	13105	12105

Note

1. R₂₅-values, temperature coefficients and catalog numbers.
2. The thermistors have a 12-digit catalog number starting with 2322 633. The subsequent 5 digits indicate the resistance value and tolerance.

DIMENSIONS in millimeters

Component outline of 2322 633 0.... (axial leads).



Component outline of 2322 633 1.... (radial leads).

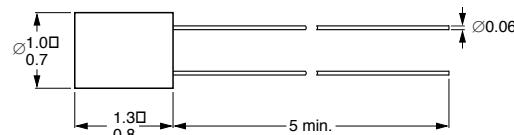
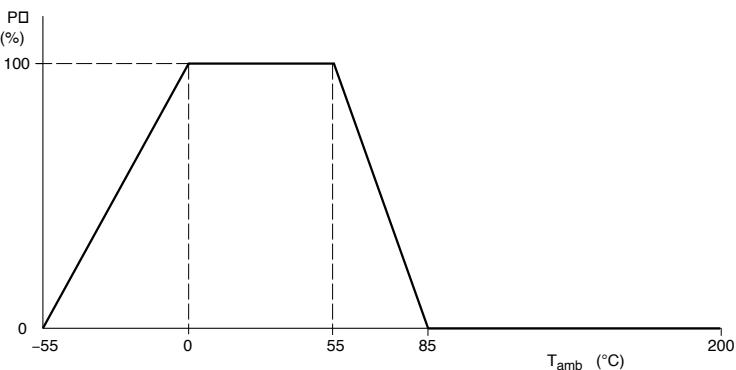
**DERATING**

Fig.3 Power derating curve.