

Dispositivos comerciales

Medida de la temperatura (1)

APPLICATION

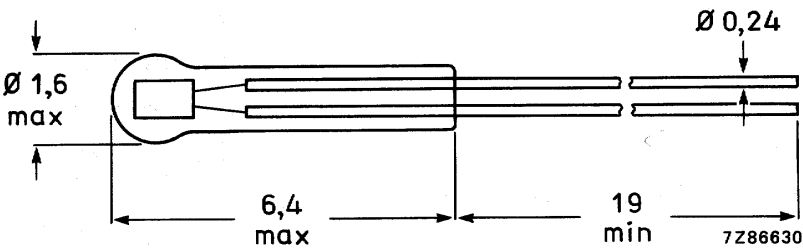
Temperature measurement and control up to 300 °C. Also level sensing.

DESCRIPTION

Bead thermistor with negative temperature coefficient, in a glass envelope with two tinned dumet (CuNiFe) wires.

MECHANICAL DATA

Outlines



Features

- Small diameter
- Quick response to changes in temperature
- Very high long term stability
- High temperature uses
- Resistant to aggressive environments

TEMPERATURE SENSING AND CONTROL

QUICK REFERENCE DATA

Resistance value at 25 °C	1 kΩ to 1 MΩ	
Tolerance on R ₂₅ value	± 5%, ± 10%	←
Tolerance on B _{25/85} value	± 5%	←
Thermal time constant	7.5 s approx.	
Response time	0.85 s approx.	←
Operating temperature range at zero power	−55 to 200 °C, or −55 to 300 °C	
at maximum power	0 to 55 °C	

Dispositivos comerciales

Medida de la temperatura (2)

DESCRIPTION

Disc thermistor with negative temperature coefficient mounted in the head of aluminium screws M4 and with two solid tinned copper wires.

MECHANICAL DATA

Outline drawing

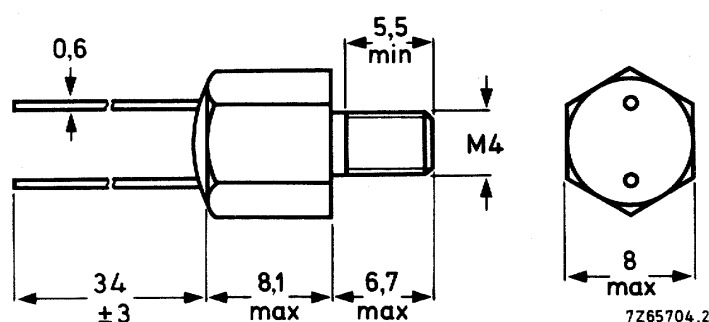


Fig.1 Component outline.

Features

- Easy mounting
- Rugged construction

TEMPERATURE SENSING AND CONTROL

QUICK REFERENCE DATA

Resistance value at + 25 °C	3.3 Ω to 1.5 k Ω
Dissipation factor	25 mW/K
Thermal time constant	20 s
Operating temperature range	
at zero power	-25 to + 100 °C
at maximum power	0 to + 55 °C

APPLICATION

Suitable for all kinds of applications, especially when a good insulation and/or a good thermal contact with the chassis is required.

Dispositivos comerciales

Limitación de picos de corriente (1)

DESCRIPTION

Disc thermistor with negative temperature coefficient, provided with reinforced contacts.

MECHANICAL DATA

Outline drawing

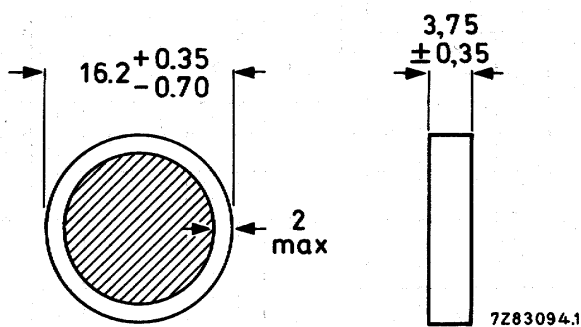


Fig. 1. Component outline.

disc without leads

Features

- high cold resistance - negligible resistance in continuous current condition.

SURGE CURRENT
LIMITING

QUICK REFERENCE DATA

Resistance value at +25 °C	5 Ω ± 20%
Resistance value at $I_{RMS} = 2.2 \text{ A}$	max. 0.5 Ω
B _{25/85} -value	2975 K
Maximum current (RMS)	8 A
Operating temperature range	
at zero power	–25 to +155 °C
at maximum power	0 to +55 °C

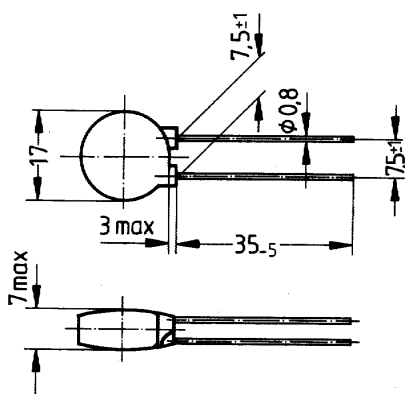
APPLICATION

For limitation of surge current.

Dispositivos comerciales

Limitación de picos de corriente (2)

Valor óhmico	4,7 Ω , 33 Ω
Aplicación	Limitación de intensidades de encendido, p.ej. en fuentes de alimentación conmutadas
Ejecución	Termistor NTC en disco, cubierto de resina epoxi, valor resistivo estampado
Conexiones	Hilos de conexión estañados



Peso aproximado: 2,0 g

Características	K 231	4,7 Ω	33 Ω	Unidad
Carga admisible a 25 °C	P_{25}	1,6	1,6	W
a 60 °C	P_{60}	1,0	1,0	W
Temperatura nominal	ϑ_N	25	25	°C
Resistencia nominal	R_N	4,7	33	Ω
Tolerancia ¹⁾	ΔR_N	± 30	± 30	%
Valor B	B	2850	3290	K
Tolerancia ¹⁾	ΔB	± 10	± 10	%
Conductancia térmica en el aire	G_{thu}	16	16	mW/K
Constante de tiempo de enfriamiento	τ_{th}	55	55	s
Capacidad térmica	C_{th}	1000	1000	mJ/K
Resistencia de calentamiento máxima admisible	R_{min}	0,4	2,0	Ω
Intensidad permanente máxima admisible a 25 °C	I_N	2,0	0,9	A
a 60 °C	I_N	1,5	0,4	A

Dispositivos comerciales

Compensación de coeficientes de temperatura positivos

DESCRIPTION

These thermistors have a negative temperature coefficient. The device consists of a chip with two Nickel wires. It is grey lacquered and colour coded, but not insulated.

MECHANICAL DATA

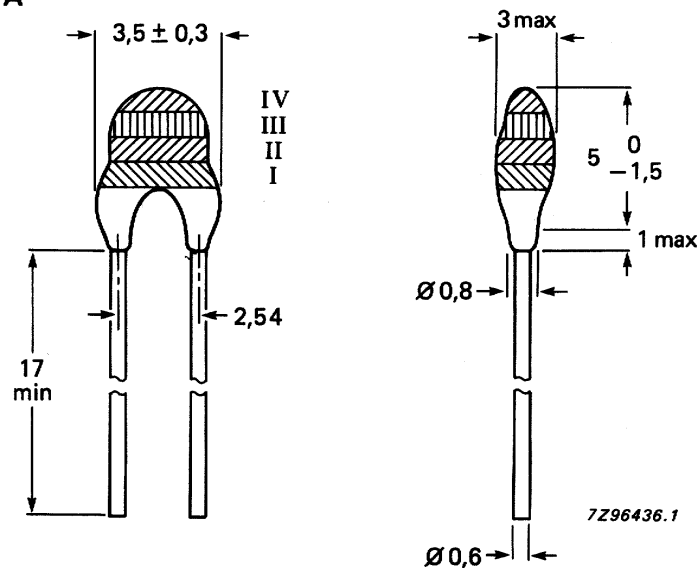


Fig.1 Component outline.

Features

- Accurate over wide temperature range
- High stability
- Excellent price/performance ratio

TEMPERATURE SENSING AND CONTROL
TEMPERATURE COMPENSATION

QUICK REFERENCE DATA

Resistance value at 25 °C	2.7 kΩ to 470 kΩ
Tolerance on R ₂₅ value	± 2%, ± 3%, ± 5%, ± 10%
Tolerance on B _{25/85} value	± 3% to ± 0.75%
Response time	1.2 s
Operating temperature range	
at zero power (continuously)	−40 to 125 °C
(for short periods) (note 1)	up to 150 °C
at maximum power (250 mW)	0 to 55 °C

APPLICATION

Temperature sensing and control.