MF52

CANTHERM

Supplying high-quality bimetal and thermal sensor products.

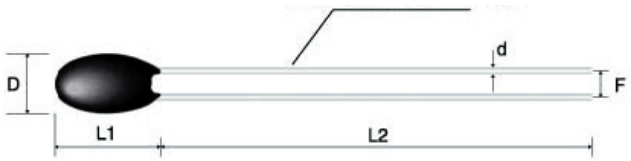
Pearl-Shaped Precision NTC Thermistor for Temperature Measurement

MF52

Pearl-Shaped Precision NTC Thermistor for Temperature Measurement. The MF52 series is ethoxyline resin coated. The small size is made possible by new materials and manufacturing methods which provide the benefit of close tolerances and fast response. MF52 thermistors are available with 5 lead styles in standard or custom lengths.

Dimensions (mm)

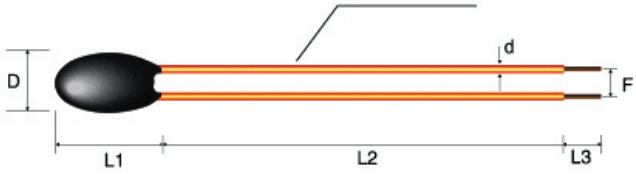
Tinned copper wire or cp wire



A: Tin. Ag. nickel plated cu wire

Code	D max	L_1 max	L_2 min	d +/- 0.05	F +/- 0.5
A1	2.5	4.0	25	0.3	1.7
A2	3	4.5	25	0.45	2.2

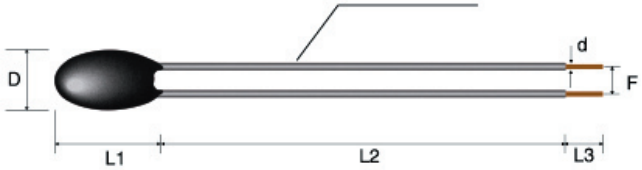
Enamelled cu wire



B: Enamelled cu wire

Code	D max	L_1 max	L_2 min	L_3 +/- 1	d +/- 0.05
B1	2	3.5	Customer Specified	3	0.2
B2	3	4	Customer Specified	3	0.3

High temp fluorin-plastic insulated cu wire



C: High temp fluorin-plastic wire

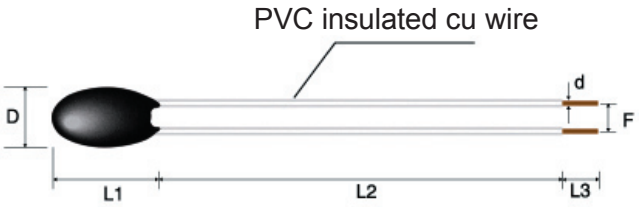
Code	D max	L_1 max	L_2 min	L_3 +/- 1	d +/- 0.05
C1	3	7.5	Customer Specified	5	0.26
C2	4	7.5	Customer Specified	5	0.32

Application

- Heating, Ventilation & Air Conditioning
- Temperature Regulation and Measurement
- Electronic Thermometers
- Liquid Level Sensing
- Automotive Electronics
- Medical Equipment and Apparatus
- Battery Packs and Portable Electronics

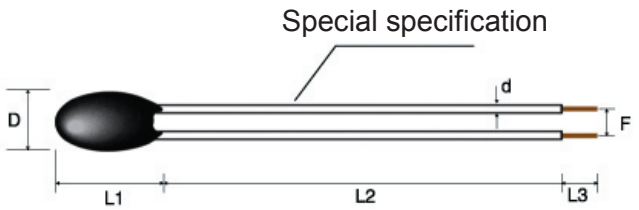
Characteristics

- Small Size and fast response
- Available tolerances: ±1%, ±2%, ±3%, ±5% and ±10%
- Long-term Stability and Reliability
- Excellent Tolerance and Interchangeability
- Available in all popular resistance values
- Dissipation Constant ≥2.0mW/°C
- Time Constant of ≤7 seconds in still air
- Available in custom probes



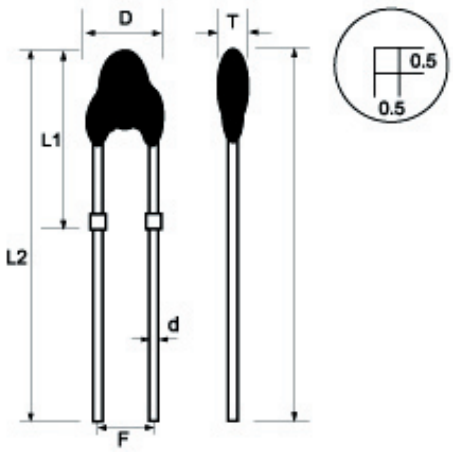
D: PVC wire

Code	D max	L_1 max	L_2 min	L_3 +/- 1	d +/- 0.05
D1	3	7.5	Customer Specified	5	0.26
D2	4	7.5	Customer Specified	5	0.32



E: Lead and head according to specification

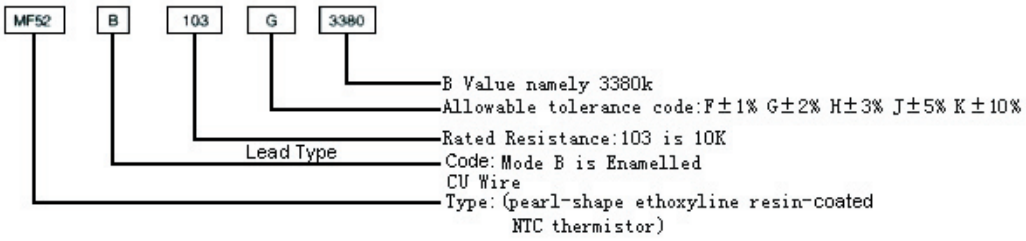
Code	D max	L_1 max	L_2 min	L_3 +/- 1	d +/- 0.05
E1	Customer Specified	Customer Specified	Customer Specified	5	Customer Specified
E2	Customer Specified	Customer Specified	Customer Specified	5	Customer Specified



F: Tinned lead-frame style

Code	D max	L_1 max	L_2 +/- 1.5	d max	F +/- 0.5	T max
F	3.8	9.5	17	0.5	2.5	3.5

Specification



Main Techno-Parameter

Part No.	Rated Resistance R_{25} (KΩ)	B Value (25/50°C) (K)	Rated Power(mw)	Dissi. Coef. (mW/°C)	Thermal time Constant(S)	Operating Temp.(°C)
MF52□□□3100	0.1-20	3100	≤ 50	≥ 2.0 In Still Air	≤ 7 In Still Air	-55° - +125°C
MF52□□□3270	0.2-20	3270				
MF52□□□3380	0.5-50	3380				
MF52□□□3470	0.5-50	3470				
MF52□□□3600	1-100	3600				
MF52□□□3950	5-100	3950				
MF52□□□4000	5-100	4000				
MF52□□□4050	5-200	4050				
MF52□□□4150	10-250	4150				
MF52□□□4300	20-1000	4300				
MF52□□□4500	20-1000	4500				

Remark:
* B Value (25/50C) error is ±1% for components with rated resistance tolerance of ±1% and ±2% for all others.
Notice:
* The two ends of the lead wire cannot endure too big pull because of the small size and soldered spot in series of MF52.
* Solder at least 5mm from the bottom of wire.

UL 1434
(File E240991)

CQC
(File 07001019009)

* Specifications are subject to change without notice.

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Supplying high-quality bimetal and thermal sensor products.

8415 Mountain Sights Avenue • Montreal (Quebec), H4P 2B8, Canada
Tel: (514) 739-3274 • 1-800-561-7207 • **Fax:** (514) 739-2902 • **E-mail:** sales@cantherm.com
Website: www.cantherm.com I Division of Microtherm