CANTHERM

Supplying high-quality bimetal and thermal sensor products.

MF51E
High Precision NTC Thermistors for Extremely Accurate Temperature Measurement

The MF51E NTC Thermistors were specially designed for use in electronic thermometers which require better than average accuracy. The extremely small size allows the thermistor to respond very quickly to tiny changes in temperature. The MF51E can be supplied un-calibrated with standard tolerances or calibrated and grouped according to R at 37°C±0.01% for extreme interchangeability so as to eliminate the need for other calibrations.



Application

- Electronic Thermometers
- Medical Equipment and Patient Monitoring

Characteristics

- Small Size and fast response and light weight
- Available tolerances: ±0.5%, ±1%, ±2%, ±3% and ±5%
- B Value tolerances: ±0.5%, ±1.0% and ±2.0%
- Resistance calibration available at 37°C ±0.01% (see table for details of grouping)
- Long-term Stability and Reliability
- Excellent Tolerance and Interchangeability
- Available in all popular resistance values
- Dissipation Constant ≥0.7mW/°C
- Time Constant of ≤3.2 seconds
- Rated Power: 3.5mW
- Operating Temperature Range -40°C to 100°C

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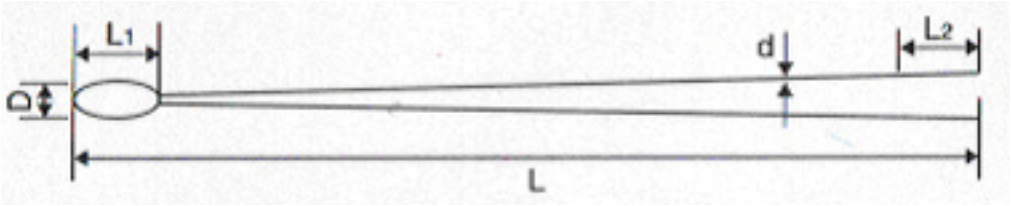
8415 Mountain Sights Avenue • Montreal (Quebec), H4P 2B8, Canada
Tel: (514) 739-3274 • 1-800-561-7207 • **Fax:** (514) 739-2902
E-mail: sales@cantherm.com • **Website:** www.cantherm.com

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Dimensions:

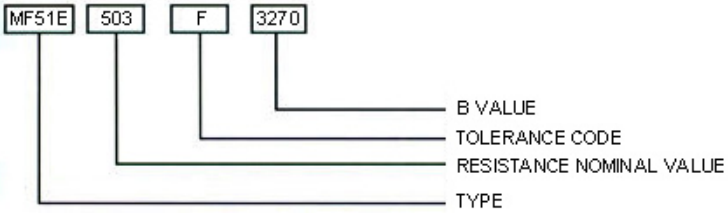


Dimension	D max	L 1 max	L 1 +/- 3	L 2 +/- 1	d +/- 0.05
Normal size	1.6	4.0	100	3	0.2
	1.6	4.0	87	3	0.2
Special size	Customer Specified	Customer Specified	Customer Specified	Customer Specified	Customer Specified

Main Techno-Parameter:

Part No.	Nominal resistance R 25°C		B Value (R25/50°C)		Rated power (mw)	Dissipation (mW/°C)	Thermal time constant (S)	Operating temp. (°C)
	Range (KΩ)	Tolerance (%)	Nominal value (K)	Tolerance (%)				
MF51E□□3270	0.2-20	E+/-0.5	3270					
MF51E□□3380	0.5-50		3380					
MF51E□□3470	0.5-50	F+/-1	3470	E+/-0.5				
MF51E□□3600	1-100		3600					
MF51E□□3950	5-100	G+/-2	3950	F+/-1	3.5	≥ 0.7	≤ 3.2	-40° - +100
MF51E□□4000	5-100		4000					
MF51E□□4050	5-200		4050					
MF51E□□4150	10-250	H+/-3	4150	G+/-2				
MF51E□□4300	20-1000		4300					
MF51E□□4500	20-1000	J+/-5	4500					

Specification:



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Resistance Calibration at 37°C +/- 0.01°C of MF51E503F3950

Group	Resistance KΩ			Group	Resistance KΩ			Group	Resistance KΩ		
	min	mid	max		min	mid	max		min	mid	max
1	29.085	29.111	29.137	12	29.668	29.695	29.721	23	30.264	30.291	30.318
2	29.138	29.164	29.189	13	29.722	29.749	29.775	24	30.319	30.346	30.373
3	29.190	29.216	29.242	14	29.776	29.802	29.828	25	30.374	30.401	30.428
4	29.243	29.269	29.294	15	29.829	29.856	29.883	26	30.429	30.456	30.483
5	29.295	29.322	29.348	16	29.884	29.910	29.936	27	30.484	30.511	30.538
6	29.349	29.375	29.400	17	29.937	29.964	29.991	28	30.539	30.566	30.593
7	29.401	29.428	29.454	18	29.992	30.019	30.045	29	30.594	30.622	30.649
8	29.455	29.481	29.507	19	30.046	30.073	30.100	30	30.650	30.677	30.703
9	29.508	29.535	29.561	20	30.101	30.128	30.154	31	30.704	30.731	30.758
10	29.562	29.588	29.614	21	30.155	30.182	30.209	32	30.759	30.785	30.811
11	29.615	29.641	29.667	22	30.210	30.237	30.263				

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