

MF52 Series bead temperature thermistor is made of new materials, new technology of production of small type epoxy resin coating of NTC thermistor, has the advantages of high precision and fast response. It is subdivided into various sub-series according to the difference in lead wire configuration.



Typical Applications	Features
<ul style="list-style-type: none"> ● Air conditioning equipment ● Heating equipment ● Medical equipment ● Temperature control instruments ● Electronic gifts ● Electronic temperature and humidity meter ● Auto temperature measurement ● Electronic calendar ● Rechargeable batteries and charger 	<ul style="list-style-type: none"> ● Tin plating steel wire radial type epoxy resin encapsulation ● Wide range of resistance ● High precision ● Small size and fast response ● High stability

Technical Data

Item	Temperature
Temperature range	-55°C to +125°C
Response time	Water (0.4m/s) $T_{0.63} \leq 7s$
Dissipation factor	$\geq 2mW/^{\circ}C$
Long-term stability	Drift $\leq 3\%$ after 1000h heat or cold store (80°C / -30°C)
Dielectric Strength	1500VAC
Insulation Resistance	$\geq 200M\Omega$ 500VDC

Dimensions (mm)

Part No.	Figure	Dimensions																		
MF52A		A. Tin. Plated copper wire																		
		Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	d ± 0.05	F ± 0.05	A1	2	3	25	0.3	2	A2	3	4	25	0.45	2	
Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	d ± 0.05	F ± 0.05															
A1	2	3	25	0.3	2															
A2	3	4	25	0.45	2															
MF52B		B. Enameled wire																		
		Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	d ± 0.05	F ± 0.05	B1	2	3	decided by user	5	0.2	2	B2	3	4	decided by user	5
Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	d ± 0.05	F ± 0.05														
B1	2	3	decided by user	5	0.2	2														
B2	3	4	decided by user	5	0.3	2														
MF52C		C. High temperature Teflon wire																		
		Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	d ± 0.05	F ± 0.05	C1	3	5	decided by user	5	0.25	2.0	C2	4	5.5	decided by user	5
Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	d ± 0.05	F ± 0.05														
C1	3	5	decided by user	5	0.25	2.0														
C2	4	5.5	decided by user	5	0.32	2.5														
MF52D		D. PVC wire																		
		Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	d ± 0.05	F ± 0.05	D1	3	5	decided by user	5	0.26	2.0	D2	4	5.5	decided by user	5
Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	d ± 0.05	F ± 0.05														
D1	3	5	decided by user	5	0.26	2.0														
D2	4	5.5	decided by user	5	0.26	2.5														
MF52E		E. Tinned steel wire																		
		Code	D _{MAX}	L1 _{MAX}	L2 ± 1.5	d _{MAX}	F ± 0.5	T _{MAX}	E	3.8	9.5	17	5.0	2.5	3.5					
Code	D _{MAX}	L1 _{MAX}	L2 ± 1.5	d _{MAX}	F ± 0.5	T _{MAX}														
E	3.8	9.5	17	5.0	2.5	3.5														
MF52F		F. Customer required																		
		<table><tr><th>Code</th><th>D_{MAX}</th><th>L1_{MAX}</th><th>L2_{MIN}</th><th>L 3 ± 1</th><th>D1 ± 0.05</th><th>F ± 0.05</th></tr><tr><td>F1</td><td>decided by user</td><td>decided by user</td><td>decided by user</td><td>5</td><td>decided by user</td><td>2.5</td></tr></table>	Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	D1 ± 0.05	F ± 0.05	F1	decided by user	decided by user	decided by user	5	decided by user	2.5				
Code	D _{MAX}	L1 _{MAX}	L2 _{MIN}	L 3 ± 1	D1 ± 0.05	F ± 0.05														
F1	decided by user	decided by user	decided by user	5	decided by user	2.5														

Ordering code

MF52 A xxx x xxxx
 (1) (2) (3) (4) (5)

- (1) Epoxy coating thermistor MF52 series
- (2) Lead wire style code :
 Model A: Tin. Plated copper wire
 Model B: Enameled wire
 Model C: High temperature Teflon wire
 Model D: PVC insulation wire
 Model E: Tinned steel wire
 Model F: Customer require
- (3) Resistance value at 25°C
- (4) Resistance tolerance code : (F : ±1%, G : ±2%, H : ±3%, J : ±5%, K : ±10%)
- (5) Beta value

Electrical characteristics

Part No.	Rated Resistance R ₂₅	B Value (25/50°C)	Rated Power (mW)	Disst. 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 ~ 500	4300				
MF52□□□4500	20 ~ 500	4500				

Notes:

- The 1st □ fills with code of dimension.
- The 2nd □ fills with rated resistance.
- The 3rd □ fills with its precision symbol.
- B value (25/50°C) tolerance: ±1%.
- Default resistance tolerance: ±1%.
- We will be able to supply products according to client's demands.