

## MF58型热敏电阻及温度传感器 High accuracy NTC thermistors Type MF58

### ■ 简介

本型号产品采用陶瓷工艺与半导体工艺相结合的技术制作而成，为两端轴向引出线玻璃封装结构。

### ■ 应用

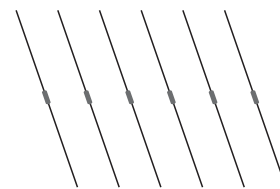
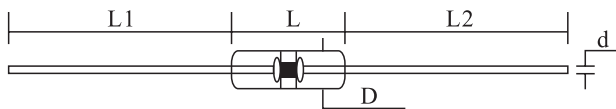
- 家用电器（如空调机、微波炉、电风扇、电取暖炉等）的温度控制与温度检测
- 办公自动化设备（如复印机、打印机等）的温度检测或温度补偿
- 工业、医疗、环保、气象、食品加工设备的温度控制与检测
- 液面指示和流量测量
- 手机电池
- 仪表线圈、集成电路、石英晶体振荡器和热电偶的温度补偿

### ■ 特点

- 稳定性好，可靠性高
- 阻值范围宽、阻值精度高
- 由于采用玻璃封装，可在高压和高湿等恶劣环境下使用
- 体积小，重量轻，结构坚固，便于自动化安装（在硬制线路板上）
- 热感应速度快，灵敏度高

### ■ 外型尺寸 (Exterior Dimension)

单位: Unit(mm)



### ■ Product Introduction

This model is manufactured by applying the technique combining ceramic process and semiconductor process, featuring an enclosed glass structure with axial leadout at both ends.

### ■ Application

- Temperature control and detection of home appliance (for example air conditioning, microwave oven, electric fan, electric warming stove, etc.)
- Temperature control and detection of automatic office devices (for example copier, printer, etc.)
- Temperature control and detection of equipment applied in industry, medical treatment, environmental protection, aerography, food processing etc.
- Level indication and flow measurement
- Cells used in mobile phone
- Temperature compensation of instrument coil, integrated circuit, quartz crystal oscillator and thermocouple.

### ■ Characteristic

- Optimal stability and reliability
- Wide range and high precise of resistance value
- Suitable for harsh environment with extremely high temperature and humidity due to enclosed glass structure.
- Easy to install automatically due to compact, light and robust structure
- Rapid heat induction and high sensitivity

### ■ 主要技术参数 (Mostly Parameter of Technology)

型号 Part No	额定电阻(Ω) Rated Resistance	B值(25℃/50℃) B Value			耗散系数 (mw/℃) Thermal Dissipation Constant	时间常数(S) ThermalTime Constang	工作温度(℃) Thermal Operating Temperature	结构封装	外型
		精度代号(%) Tolerance Code	数值(K) Bet Value	B值 代号 Code					
MF58□ □ A	100-20K	±1→F ±2→G ±3→H ±5→J ±10→K ±20→M	3100	A	≥2  静止空气中  Quit In Air	≤20  静止空气中  Quit In Air	-55~250	玻璃封装  二极管式	φ2×4 (玻管)  φ0.5×2 (引线)
MF58□ □ B	200-20K		3270	B					
MF58□ □ C	500-50K		3380	C					
MF58□ □ D	500-50K		3435	D					
MF58□ □ E	500-50K		3470	E					
MF58□ □ F	1K-100K		3600	F					
MF58□ □ G	5K-100K		3950	G					
MF58□ □ H	5K-200K		4000	H					
MF58□ □ I	5K-500K		4050	I					
MF58□ □ J	10K-250K		4150	J					
MF58□ □ K	20K-1000K		4300	K					
MF58□ □ L	20K-1000K		4500	L					

**深圳市裕合电子有限公司**  
**SHENZHEN YUHE ELECTRIC CO., LTD.**

**■ 主要技术参数 (Mostly Parameter of Technology)**

单位: K Ω

R <sub>1</sub> / R <sub>25</sub> T	3K Ω	5K Ω	5K Ω	5K Ω	8.495 K Ω	10K Ω	10K Ω	10K Ω	10K Ω	50K Ω	100 K Ω	50K Ω	50K Ω	100 K Ω	100 K Ω	150 K Ω
	-30℃	31.70	52.84	61.28	90.83	102.7	111.3	122.6	132.4	181.7	908.3					
-25℃	24.71	41.19	47.04	66.65	78.61	86.39	94.07	100.7	133.3	666.5						
-20℃	19.46	32.43	36.43	49.44	60.88	67.74	72.86	77.30	98.88	494.4						
-15℃	15.39	25.65	28.42	37.05	47.56	53.39	56.84	59.85	74.10	370.5						
-10℃	12.29	20.48	22.35	28.03	37.45	42.45	44.70	46.70	56.06	280.3						
-5℃	9.858	16.43	17.69	21.40	29.71	33.89	35.39	36.72	42.80	241.0						
0℃	7.974	13.29	14.11	16.48	23.73	27.28	28.22	29.08	32.96	164.8	322.3	168.8	172.1	344.2	352.4	576.7
5℃	6.480	10.80	11.32	12.79	19.09	22.05	22.65	23.20	25.58	127.9	257.5	131.1	133.2	266.4	280.7	433.2
10℃	5.303	8.839	9.150	9.998	15.45	17.96	18.30	18.62	20.00	99.98	201.1	101.2	102.8	205.6	208.3	328.4
15℃	4.360	7.266	7.436	7.879	12.58	14.68	14.87	15.05	15.76	78.79	158.2	79.28	80.15	160.3	160.4	250.9
20℃	3.608	6.013	6.081	6.255	10.31	12.09	12.16	12.23	12.51	62.55	125.4	62.78	63.12	126.2	126.7	193.3
25℃	3.000	5.000	5.000	5.000	8.495	10.00	10.00	10.00	10.00	50.00	100.0	50.00	50.00	100.0	100.0	150.0
30℃	2.507	4.179	4.134	4.024	7.037	8.313	8.268	8.222	8.048	40.24	80.29	39.98	39.79	79.59	78.35	117.3
35℃	2.105	3.508	3.435	3.259	5.860	6.941	6.871	6.797	6.518	32.59	64.87	32.16	31.87	63.73	61.82	92.28
40℃	1.777	2.962	2.870	2.656	4.905	5.828	5.740	5.646	5.312	26.56	57.72	26.10	25.73	51.45	49.94	73.11
45℃	1.506	2.510	2.409	2.177	4.125	4.912	4.818	4.715	4.354	21.77	43.10	21.35	20.92	41.83	41.07	58.28
50℃	1.283	2.138	2.032	1.794	3.485	4.161	4.064	3.954	3.588	17.94	35.42	17.46	17.01	34.02	32.56	46.74
55℃	1.096	1.826	1.721	1.487	2.957	3.537	3.443	3.333	2.974	14.87	29.26	14.37	14.00	28.00	26.35	37.71
60℃	0.9408	1.568	1.465	1.238	2.521	3.021	2.930	2.821	2.476	12.38	24.30	11.92	11.50	23.00	21.53	30.58
65℃	0.8106	1.351	1.252	1.036	2.157	2.589	2.503	2.397	2.072	10.36	20.27	9.936	9.529	19.06	17.71	24.94
70℃	0.7014	1.169	1.074	0.8717	1.853	2.229	2.148	2.046	1.743	8.717	16.99	8.317	7.954	15.91	14.62	20.45
75℃	0.6084	1.014	0.9251	0.7364	1.598	1.923	1.850	1.752	1.437	7.364	14.31	6.992	6.670	13.34	12.11	16.85
80℃	0.5303	0.8838	0.7998	0.6248	1.384	1.669	1.600	1.507	1.250	6.248	12.10	5.905	5.615	11.23	10.05	13.94
85℃	0.4635	0.7725	0.6941	0.5324	1.202	1.451	1.388	1.301	1.065	5.324	10.27	5.012	4.747	9.493	8.371	11.60
90℃	0.4046	0.6774	0.6044	0.4555	1.048	1.226	1.209	1.126	0.9110	4.555	8.758	4.271	4.034	8.068	7.004	9.680
95℃	0.3578	0.5963	0.5282	0.3912	0.9164	1.108	1.056	0.9790	0.7824	3.912	7.495	3.654	3.446	6.892	5.890	8.118
100℃	0.3160	0.5267	0.4630	0.3372	0.8041	0.9735	0.9260	0.8535	0.6744	3.372	6.438	3.136	2.956	5.912	4.978	6.836
105℃	0.2794	0.4656	0.4071	0.2918	0.7077	0.8574	0.8142	0.7465	0.5836	2.918	5.550	2.701	2.542	5.084	4.222	5.780
110℃	0.2478	0.4130	0.3592	0.2533	0.6247	0.7582	0.7184	0.6549	0.5066	2.533	4.801	2.335	2.189	4.377	3.580	4.904
B <sub>25/50</sub> K	3270	3270	3470	3950	3435	3380	3470	3600	3950	3950	4000	4050	4150	4150	4300	4500
B值代号	B	B	E	G	D	C	E	F	G	G	H	I	J	J	K	L