



# NTC Thermistors



Dimensions in mm

**CWF Precision NTC Thermistor Probes** Features: • Small size and fast response, temperature coefficient of resistance can reach: (2% ~ 5%/°C) • Long-term stability and reliability (yearly drift of ≤1%) • Excellent tolerance and interchangeability (the accuracy of R and B value can be ±1%) • Double layer packaging provides excellent insulation and high strength and impact resistance • Time Constant of ≤15S ~ 70S

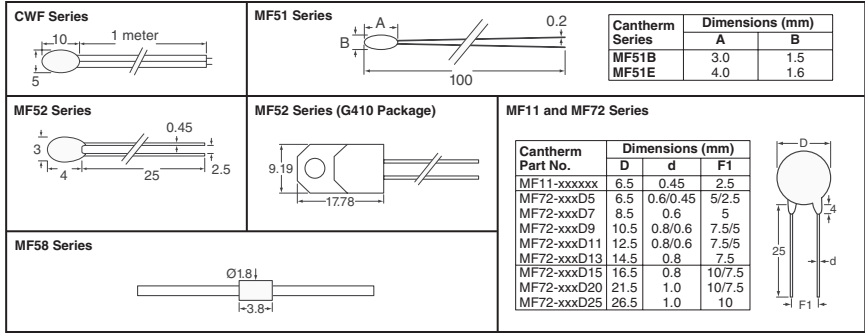
**MF11 NTC Thermistor** Features: • Broad range of resistance • Standard tolerances: ±5% and ±10% • Measuring power ≤0.5mW • Dissipation Constant ≥6.0mW/°C • Time Constant of ≤30 seconds • Rated Power: 0.5W • Good level of tolerance and interchangeability

**MF52 Precision Glass Encapsulated NTC Thermistor** Benefits: • High precision • Fast response • Reliable stability • No aging effect • Improved moisture resistance

**MF52 NTC Thermistor** Features: • Small size and fast response • Long-term Stability and Reliability • Excellent tolerance and interchangeability • Time Constant of ≤7 seconds in still air • UL Listed E240991

**MF58 Glass Shell Precision NTC Thermistors** Features: • Usable in high temperature and high moisture environments • Suitable for automatic insertion on thru-hole PCBs • Rapid response • High Sensitivity • Dissipation factor: ≥2mW/°C (in still air) • Operating temperature range: -55°C ~ 200°C • Rated power: ≤50mW

**MF72 Power NTC Thermistors** Features: • Small size and fast response • High power handling capability • Fast response to surge current • High material constant (B value) • Low residual resistance • Long-term Stability and Reliability • UL 1434 Listed E241319



Resistance (Ω)	Tolerance (±)	Digi-Key Part No.	1	Pricing 10 50	Cantherm Part No.
<b>CWF Series</b>					
10K	1%	317-1310-ND	4.05	35.48 126.73	CWF1B103F3380
100K	1%	317-1311-ND	4.05	35.48 126.73	CWF1B104F3950
10K	2%	317-1312-ND	3.55	31.06 110.91	CWF1B103G3380
100K	2%	317-1313-ND	3.55	31.06 110.91	CWF1B104G3950
10K	3%	317-1314-ND	3.04	26.63 95.10	CWF1B103H3380
100K	3%	317-1315-ND	3.04	26.63 95.10	CWF1B104H3950
100K	5%	317-1317-ND	2.03	17.77 63.46	CWF1B104J3950
10K	2%	317-1382-ND	5.30	46.41 165.77	CWF3AA103G3380
100K	2%	317-1383-ND	5.30	46.41 165.77	CWF3AA104G4150
50K	2%	317-1384-ND	5.30	46.41 165.77	CWF3AA503G3950
10K	2%	317-1385-ND	5.30	46.41 165.77	CWF4B103G3380
<b>MF11 Series</b>					
20	5%	317-1267-ND	.50	4.43 15.82	MF11-0002005
100	5%	317-1270-ND	.50	4.43 15.82	MF11-0010005
250	5%	317-1272-ND	.50	4.43 15.82	MF11-0025005
300	5%	317-1274-ND	.50	4.43 15.82	MF11-0030005
350	5%	317-1274-ND	.50	4.43 15.82	MF11-0035005
600	5%	317-1275-ND	.50	4.43 15.82	MF11-0060005
800	5%	317-1276-ND	.50	4.43 15.82	MF11-0080005
1000	5%	317-1277-ND	.50	4.43 15.82	MF11-0100005
2000	5%	317-1279-ND	.50	4.43 15.82	MF11-0200005
3300	5%	317-1280-ND	.50	4.43 15.82	MF11-0330005
4600	5%	317-1281-ND	.50	4.43 15.82	MF11-0460005
33K	5%	317-1285-ND	.50	4.43 15.82	MF11-0330005
100	10%	317-1289-ND	.26	2.22 7.91	MF11-0010010
170	10%	317-1290-ND	.26	2.22 7.91	MF11-0017010
250	10%	317-1291-ND	.26	2.22 7.91	MF11-0025010
300	10%	317-1292-ND	.26	2.22 7.91	MF11-0030010
350	10%	317-1293-ND	.26	2.22 7.91	MF11-0035010
600	10%	317-1294-ND	.26	2.22 7.91	MF11-0060010
1400	10%	317-1297-ND	.26	2.22 7.91	MF11-0140010
2000	10%	317-1298-ND	.26	2.22 7.91	MF11-0200010
3300	10%	317-1299-ND	.26	2.22 7.91	MF11-0330010
4600	10%	317-1300-ND	.26	2.22 7.91	MF11-0460010
33000	10%	317-1304-ND	.26	2.22 7.91	MF11-3300010
<b>MF51B Series</b>					
10K	1%	317-1370-ND	3.54	30.94 110.51	MF51B103F3380
100K	1%	317-1371-ND	3.54	30.94 110.51	MF51B104F3950
50K	1%	317-1372-ND	3.54	30.94 110.51	MF51B503F3950
<b>MF51E Series</b>					
10K	0.5%	317-1305-ND	2.88	25.23 90.09	MF51E103E3950
10K	1%	317-1306-ND	1.59	13.85 49.45	MF51E103F3950
2.25K	1%	317-1488-ND	1.91	16.65 59.46	MF51E2.252F3950C
10K	1%	317-1309-ND	1.91	16.65 59.46	MF51E103F3950C
22.5K	1%	317-1308-ND	1.91	16.65 59.46	MF51E2252F3950C
10K	2%	317-1307-ND	1.59	13.85 49.45	MF51E103G3950
<b>MF52 Series</b>					
10K	1%	317-1355-ND	1.27	11.08 39.54	MF52A1103F3380
100K	1%	317-1356-ND	1.27	11.08 39.54	MF52A1104F4150
10K	2%	317-1357-ND	.76	6.67 23.82	MF52A1103G3380
100K	2%	317-1358-ND	.76	6.67 23.82	MF52A1104G4150
4.7K	3%	317-1360-ND	.48	4.20 15.02	MF52A1472H3470
100K	3%	317-1362-ND	.48	4.20 15.02	MF52A1104H4150
1.5K	5%	317-1252-ND	.30	2.67 9.51	MF52A152J3470
2K	5%	317-1253-ND	.30	2.67 9.51	MF52A202J3470
2.2K	5%	317-1254-ND	.30	2.67 9.51	MF52A222J3470
4.7K	5%	317-1256-ND	.30	2.67 9.51	MF52A472J3470
6.8K	5%	317-1257-ND	.30	2.67 9.51	MF52A682J3470

Resistance (Ω)	Tolerance (±)	Digi-Key Part No.	1	Pricing 10 50	Cantherm Part No.
<b>MF52 Series</b>					
10K	5%	317-1258-ND	.30	2.67 9.51	MF52A2103J3470
15K	5%	317-1259-ND	.30	2.67 9.51	MF52A153J3470
22K	5%	317-1260-ND	.30	2.67 9.51	MF52A223J3470
33K	5%	317-1363-ND	.30	2.67 9.51	MF52A233J3950
47K	5%	317-1364-ND	.30	2.67 9.51	MF52A1473J950
68K	5%	317-1263-ND	.30	2.67 9.51	MF52A683J950
100K	5%	317-1264-ND	.30	2.67 9.51	MF52A1104J3950
220K	5%	317-1265-ND	.30	2.67 9.51	MF52A1224J4150
<b>MF52 Series</b>					
10K	1%	317-1376-ND	1.58	13.79 49.25	MF52C1103F3380
100K	1%	317-1377-ND	1.58	13.79 49.25	MF52C1104F4150
50K	1%	317-1378-ND	1.58	13.79 49.25	MF52C1503F3950
10K	1%	317-1406-ND	5.30	46.41 165.77	MF52C103F3380-G410
100K	1%	317-1407-ND	5.30	46.41 165.77	MF52C104F4150-G410
50K	1%	317-1408-ND	5.30	46.41 165.77	MF52C503F3950-G410
<b>MF52C Series</b>					
10K	1%	317-1373-ND	1.54	13.45 48.05	MF52F103F3380
100K	1%	317-1374-ND	1.54	13.45 48.05	MF52F104F4150
50K	1%	317-1375-ND	1.54	13.45 48.05	MF52F503F3950
<b>MF58 Series</b>					
10K	1%	317-1379-ND	1.27	11.10 39.64	MF58103F3380
100K	1%	317-1380-ND	1.27	11.10 39.64	MF58104F3950
50K	1%	317-1381-ND	1.27	11.10 39.64	MF58503F3950
<b>MF72 Series</b>					
5	20%	317-1144-ND	.34	3.03 10.81	MF72-00505
10	20%	317-1145-ND	.29	2.52 9.01	MF72-01005
60	20%	317-1146-ND	.34	3.03 10.81	MF72-06005
200	20%	317-1147-ND	.34	3.03 10.81	MF72-20005
5	20%	317-1148-ND	.34	3.03 10.81	MF72-00507
8	20%	317-1149-ND	.34	3.03 10.81	MF72-00807
10	20%	317-1150-ND	.29	2.52 9.01	MF72-01007
12	20%	317-1151-ND	.34	3.03 10.81	MF72-01207
16	20%	317-1152-ND	.34	3.03 10.81	MF72-01607
22	20%	317-1153-ND	.34	3.03 10.81	MF72-02207
33	20%	317-1154-ND	.34	3.03 10.81	MF72-03307
200	20%	317-1155-ND	.34	3.03 10.81	MF72-20007
3	20%	317-1156-ND	.38	3.34 11.92	MF72-00309
4	20%	317-1157-ND	.38	3.34 11.92	MF72-00409
5	20%	317-1158-ND	.38	3.34 11.92	MF72-00509
6	20%	317-1159-ND	.38	3.34 11.92	MF72-00609
8	20%	317-1160-ND	.38	3.34 11.92	MF72-00809
10	20%	317-1161-ND	.32	2.78 9.91	MF72-01009
12	20%	317-1162-ND	.38	3.34 11.92	MF72-01209
16	20%	317-1163-ND	.38	3.34 11.92	MF72-01609
20	20%	317-1164-ND	.38	3.34 11.92	MF72-02009
22	20%	317-1165-ND	.38	3.34 11.92	MF72-02209
30	20%	317-1166-ND	.38	3.34 11.92	MF72-03009
33	20%	317-1167-ND	.38	3.34 11.92	MF72-03309
50	20%	317-1168-ND	.38	3.34 11.92	MF72-05009
60	20%	317-1169-ND	.38	3.34 11.92	MF72-06009
80	20%	317-1170-ND	.38	3.34 11.92	MF72-08009
120	20%	317-1171-ND	.38	3.34 11.92	MF72-12009
200	20%	317-1172-ND	.38	3.34 11.92	MF72-20009
400	20%	317-1173-ND	.38	3.34 11.92	MF72-40009
2.5	20%	317-1174-ND	.44	3.87 13.81	MF72-0025D11
3	20%	317-1175-ND	.44	3.87 13.81	MF72-003D11
4	20%	317-1176-ND	.44	3.87 13.81	MF72-004D11
5	20%	317-1177-ND	.44	3.87 13.81	MF72-005D11
6	20%	317-1178-ND	.44	3.87 13.81	MF72-006D11
8	20%	317-1179-ND	.44	3.87 13.81	MF72-008D11
10	20%	317-1180-ND	.44	3.87 13.81	MF72-010D11

Resistance (Ω)	Tolerance (±)	Digi-Key Part No.	1	Pricing 10 50	Cantherm Part No.
<b>MF11 and MF72 Series</b>					
12	20%	317-1181-ND	.37	3.23 11.53	MF72-012D11
16	20%	317-1182-ND	.44	3.87 13.81	MF72-016D11
20	20%	317-1183-ND	.44	3.87 13.81	MF72-020D11
22	20%	317-1184-ND	.44	3.87 13.81	MF72-022D11
30	20%	317-1185-ND	.44	3.87 13.81	MF72-030D11
33	20%	317-1186-ND	.44	3.87 13.81	MF72-033D11
50	20%	317-1187-ND	.44	3.87 13.81	MF72-050D11
60	20%	317-1188-ND	.44	3.87 13.81	MF72-060D11
80	20%	317-1189-ND	.44	3.87 13.81	MF72-080D11
1.3	20%	317-1190-ND	.79	6.93 24.73	MF72-001.3D13
1.5	20%	317-1191-ND	.79	6.93 24.73	MF72-001.5D13
2.5	20%	317-1192-ND	.79	6.93 24.73	MF72-002.5D13
3	20%	317-1193-ND	.79	6.93 24.73	MF72-003D13
4	20%	317-1194-ND	.79	6.93 24.73	MF72-004D13
5	20%	317-1195-ND	.79	6.93 24.73	MF72-005D13
6	20%	317-1196-ND	.79	6.93 24.73	MF72-006D13
7	20%	317-1197-ND	.79	6.93 24.73	MF72-007D13
8	20%	317-1198-ND	.79	6.93 24.73	MF72-008D13
10	20%	317-1199-ND	.79	6.93 24.73	MF72-010D13
12	20%	317-1200-ND	.66	5.77 20.62	MF72-012D13
15	20%	317-1201-ND	.79	6.93 24.73	MF72-015D13
16	20%	317-1202-ND	.79	6.93 24.73	MF72-016D13
20	20%	317-1203-ND	.79	6.93 24.73	MF72-020D13
30	20%	317-1204-ND	.79	6.93 24.73	MF72-030D13
47	20%	317-1205-ND	.79	6.93 24.73	MF72-047D13
120	20%	317-1206-ND	.79	6.93 24.73	MF72-120D13
1.3	20%	317-1207-ND	1.14	9.98 35.64	MF72-001.3D15
1.5	20%	317-1208-ND	1.14	9.98 35.64	MF72-001.5D15
3	20%	317-1209-ND	1.14	9.98 35.64	MF72-003D15
5	20%	317-1210-ND	1.14	9.98 35.64	MF72-005D15
6	20%	317-1211-ND	1.14	9.98 35.64	MF72-006D15
7	20%	317-1212-ND	1.14	9.98 35.64	MF72-007D15
8	20%	317-1213-ND	1.14	9.98 35.64	MF72-008D15
10	20%	317-1214-ND	1.14	9.98 35.64	MF72-010D15
12	20%	317-1215-ND	.95	8.33 29.73	MF72-012D15
15	20%	317-1216-ND	1.14	9.98 35.64	MF72-015D15
16	20%	317-1217-ND	1.14	9.98 35.64	MF72-016D15
20					