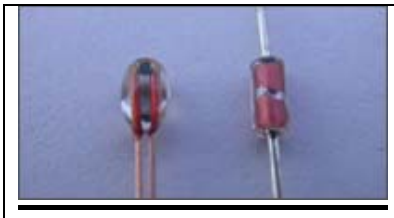


MF58-TYPE THERMISTOR OF HIGH PRECISION WITH NEGATIVE TEMPERATURE COEFFICIENT SERIES SPECIFICATION

*** Outline:**

A combination of ceramic craftsmanship with semi-conductor craftsmanship is adopted for manufacturing products of this model. Products of this model are glass-packed with axial lead at both ends.

*** Application :**

1. For Temperature testing and control in domestic appliances such as air-conditioners, micro-wave ovens, electric fans, and electric heaters.
2. Temperature testing or temperature compensation in automatic office facilities such as copiers and printers.
3. Temperature control and testing in facilities concerning industry, health-care, environment protection, weather forecasting and food processing.
4. Liquid level indicating and flow measuring.
5. Cells for mobile telephones.
6. Temperature compensation to coils for meters, integrated circuits, quartz crystal oscillators and thermocouples.

***Features :**

1. High stability and reliability.
Wide range of resistance value from 0.1 to 1000k
2. High precision of resistance value.
3. Usable even under high-temperature and high-humidity environment owing to its glass encapsulation.
4. So small, light and solid in structure as to be convenient for auto mounting (to a printed circuit board).
5. Response quickly to and highly sensitive to thermal sensation.

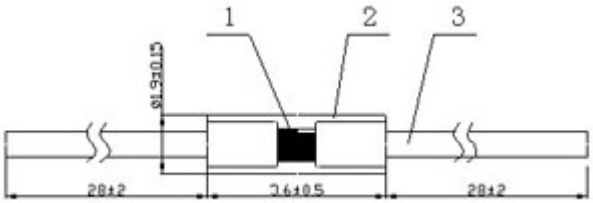
***Specification：**

*** Part Number：**

MF58	Z	103	F	L	347
①	②	③	④	⑤	⑥

① Glass- packed Thermistor
② Z: Axial lead J: Radial lead
③ Resistance: 103---10kΩ 502----5kΩ
④ Tolerance of Resistance:F---±1% G---±2% H---±3% J---±5%
⑤ L: B25/50 H: B25/85 T: For the special temperature digits
⑥ B-Value:347=3470 395=3950

*** Dimensions (mm)：**



MF58Z

MF58J

*NORMAL SPECIFICATION RESISTANCE AND TEMPERATURE TABLE
UNIT TABLE OF MF58Z-TYPE UNIT（KΩ）

R25 / B / T °C / Rt	5 KΩ	10 KΩ	5KΩ	10 KΩ	10 KΩ	10 KΩ	10 KΩ	47 KΩ	50 KΩ	100KΩ	23KΩ
	3270	3380	3470	3470	3550	3700	3950	3950	3950	3990	4200
-40	91.35	201.36	109.52	223.17	244.82	278.64	343.12	1672.6	1715.6		960
-35	69.936	152.72	82.394	167.6	181.45	204.43	247.22	1195.8	1236.1		681.7
-30	54.022	116.91	62.588	127.09	135.97	151.58	180.17	865.62	900.83	1810	489.1
-25	42.08	90.288	47.975	97.256	105.94	113.53	132.72	633.97	663.58	1338	354.4
-20	33.034	70.301	37.088	75.066	78.687	85.854	98.754	469.43	493.77	997.9	259.3
-15	26.131	55.165	28.903	58.41	60.7	65.52	74.184	351.21	370.92	750.4	190.5
-10	20.814	43.604	22.695	45.797	47.229	50.439	56.229	265.34	281.14	568.8	142.7
-5	16.688	34.705	17.948	36.167	37.046	39.153	42.981	202.32	214.91	434.6	107.3
0	13.452	27.794	14.286	28.748	29.283	30.635	33.109	155.61	165.54	334.5	81.38
5	10.907	22.378	11.435	22.952	23.315	24.152	25.676	120.68	128.38	259.3	62.24
10	8.898	18.134	9.213	18.427	18.691	19.179	20.067	94.316	100.34	202.4	47.98
15	7.302	14.786	7.471	14.942	15.082	15.336	15.8	74.262	79.002	159.1	37.27
20	6.026	12.126	6.094	12.189	12.245	12.345	12.528	58.882	62.641	125.8	29.17
25	5	10	5	10	10	10	10	47	50	100	23
30	4.173	8.295	4.127	8.253	8.217	8.15	8.037	37.775	40.186	80.23	18.26
35	3.503	6.922	3.427	6.854	6.795	6.681	6.506	30.576	32.528	64.77	14.59
40	2.957	5.81	2.863	5.726	5.653	5.507	5.301	24.917	26.507	52.6	11.74
45	2.509	4.903	2.406	4.811	4.731	4.564	4.348	20.436	21.741	42.96	9.601
50	2.139	4.16	2.032	4.064	3.981	3.801	3.588	16.864	17.941	35.28	7.735
55	1.831	3.542	1.723	3.445	3.359	3.183	2.974	13.973	14.869	29.12	6.333
60	1.573	3.028	1.467	2.934	2.847	2.677	2.477	11.636	12.387	24.16	5.213
65	1.357	2.6	1.255	2.509	2.423	2.262	2.047	9.736	10.37	20.15	4.312
70	1.174	2.241	1.077	2.154	2.071	1.92	1.744	8.841	8.722	16.87	6.585
75	1.018	1.935	0.926	1.853	1.776	1.636	1.47	6.91	7.351	14.2	2.994
80	0.885	1.676	0.799	1.599	1.529	1.4	1.244	5.859	6.22	12	2.511
85	0.772	1.455	0.692	1.384	1.315	1.203	1.057	4.988	5.283	10.17	2.114
0	0.673	1.264	0.599	1.198	1.135	1.037	0.898	4.24	4.489	8.661	1.767
95	0.588	1.101	0.52	1.039	0.981	0.897	0.765	3.61	3.827	7.408	1.516
100	0.515	0.961	0.452	0.904	0.851	0.779	0.654	3.091	3.271	6.36	1.29
105	0.452	0.84	0.394	0.788	0.74	0.679	0.561	2.651	2.804	5.48	1.101
110	0.398	0.737	0.345	0.689	0.644	0.594	0.482	2.28	2.411	4.738	0.942
115	0.351	0.647	0.302	0.604	0.563	0.52	0.416	1.965	2.078	4.11	
120	0.31	0.57	0.265	0.53	0.492		0.359	1.698	1.795	3.581	
125	0.274	0.503	0.233	0.466	0.432		0.311	1.471	1.555	3.126	
130	0.243	0.444	0.205	0.411	0.38		0.27	1.278	1.35	2.737	

* Specification Resistance&Temperature Table of MF58J-type

阻值 / B值 / 温度(℃)	R200℃ =1KΩ B100/200= 4537K±3%	R200℃ =4KΩ B200/300= 5133K±3%	R200℃ =8KΩ B150/250= 5300K±3%	阻值 / B值 / 温度(℃)	R200℃ =1KΩ B100/200= 4537K±3%	R200℃ =4KΩ B200/300= 5133K±3%	R200℃ =8KΩ B150/250= 5300K±3%
0	806.5	5336	15577	250	0.3865	1.432	2.699
5	618.9	4009	11544	255	0.3547	1.305	2.446
10	478.8	3039	8632	260	0.3259	1.191	2.22
15	373.1	2322	6511	265	0.3	1.088	2.018
20	292.9	1789	4951	270	0.2765	0.9958	1.837
25	231.4	1388	3794	275	0.2552	0.9127	1.675
30	184.1	1085	2929	280	0.2358	0.8377	1.53
35	147.4	853.9	2278	285	0.2182	0.77	1.399
40	118.7	676.5	1783	290	0.2022	0.7086	1.128
45	96.13	539.3	1405	295	0.1876	0.6531	1.175
50	78.29	432.5	1115	300	0.1743	0.6026	1.079
55	64.1	348.9	889.3	305	0.1621	0.5565	0.9923
60	52.76	283	713.6	310	0.1509	0.5146	0.9137
65	43.63	230.8	575.9	315	0.1406	0.4764	0.8423
70	36.26	189.2	467.2	320	0.1311	0.4415	0.7775
75	30.27	155.9	380.9	325	0.1224	0.4097	0.7185
80	25.38	129	312.2	330	0.1144	0.3806	0.6648
85	21.37	107.3	257	335	0.1071	0.3539	0.6159
90	18.06	89.57	212.6	340	0.1003	0.3295	0.5711
95	15.33	75.12	176.7	345	0.094	0.3071	0.5302
100	13.06	63.26	147.4	350	0.0882	0.2864	0.4928
105	11.17	53.48	123.5	355	0.0828	0.2675	0.4585
110	9.585	45.38	103.9	360	0.0778	0.25	0.427
115	8.254	38.65	87.71	365	0.0732	0.2339	0.3981
120	7.131	33.04	74.34	370	0.0689	0.2191	0.3715
125	6.181	28.34	63.23	375	0.0649	0.2054	0.3471
130	5.374	24.39	53.97	380	0.0612	0.1927	0.3245
135	4.686	21.05	46.22	385	0.0578	0.181	0.3037
140	4.098	18.23	39.71	390	0.0546	0.1701	0.2845
145	3.594	15.84	34.22	395	0.0516	0.16	0.2668

* Specification Resistance&Temperature Table of MF58J-type

阻值 / B值 / 温度(℃)	R200℃ =1KΩ	R200℃ =4KΩ	R200℃ =8KΩ	阻值 / B值 / 温度(℃)	R200℃ =1KΩ	R200℃ =4KΩ	R200℃ =8KΩ
	B100/200= 4537K±3%	B200/300= 5133K±3%	B150/250= 5300K±3%		B100/200= 4537K±3%	B200/300= 5133K±3%	B150/250= 5300K±3%
150	3.161	13.8	29.58	400	0.0488	0.1507	0.2503
155	2.787	12.05	25.65	405	0.0462	0.142	0.2351
160	2.464	10.56	22.3	410	0.0437	0.1339	0.221
165	2.184	9.272	19.45	415	0.0414	0.1264	0.208
170	1.94	8.164	17	420	0.0393	0.1194	0.1958
175	1.728	7.207	14.9	425	0.0373	0.1128	0.1845
180	1.542	6.377	13.1	430	0.0354	0.1067	0.174
185	1.379	5.656	11.54	435	0.0336	0.1011	0.1642
190	1.237	5.028	10.19	440	0.032	0.0957	0.1551
195	1.111	4.48	9.018	445	0.0304	0.0908	0.1466
200	1	4	8	450	0.029	0.0861	0.1387
205	0.902	3.579	7.112	455	0.0276	0.0818	0.1313
210	0.8151	3.209	6.337	460	0.0263	0.0777	0.1244
215	0.738	2.882	5.658	465	0.0251	0.0739	0.1179
220	0.6694	2.594	5.061	470	0.0239	0.0703	0.1118
225	0.6083	2.34	4.537	475	0.0228	0.0669	0.1061
230	0.5537	2.114	4.075	480	0.0218	0.0637	0.1008
235	0.5049	1.913	3.666	485	0.0208	0.0607	0.0958
240	0.4611	1.734	3.305	490	0.0199	0.0579	0.0911
245	0.4218	1.575	2.984	495	0.019	0.0553	0.0867
				500	0.0182	0.0528	0.0826