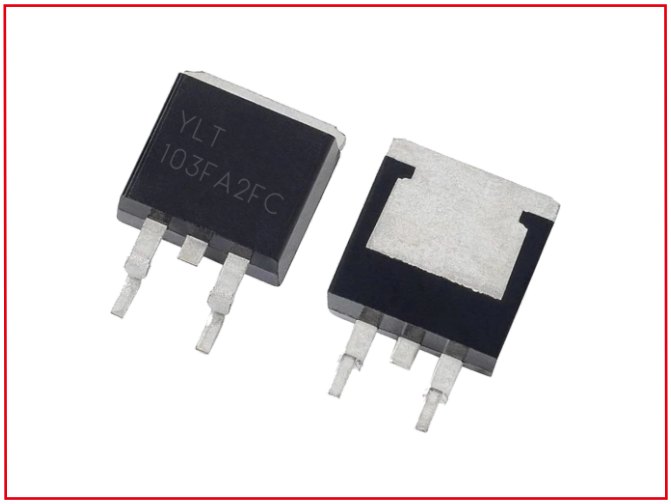
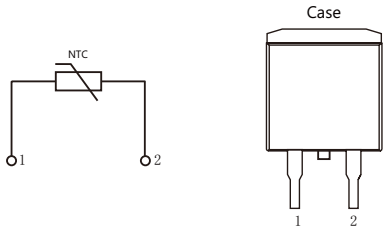
Surface Temperature Sensing
TO-263 Serises Thermistor Probe



Features

- 符合AEC-Q200Rev-C要求
- 宽温范围:-40°C-200°C
- 绝缘耐压≥3000Vac
- 可定制不同的阻值及精度
- TO-263 (D2PAK) 的标准封装
- 满足RoHS与无卤要求

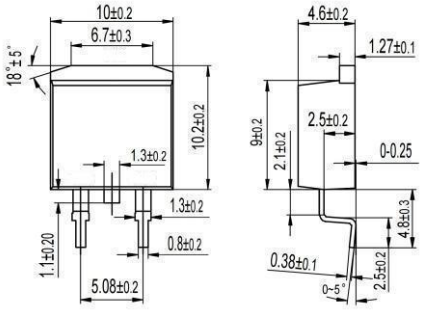
Circuit Diagram



Applications

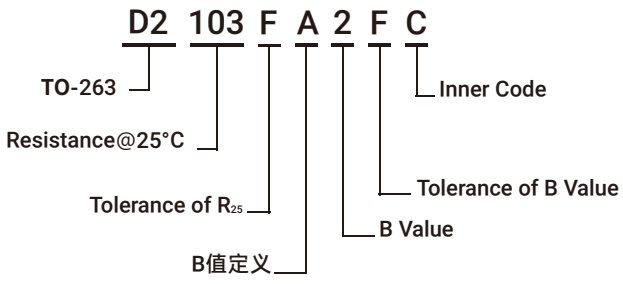
- 新能源汽车、轨道交通
- 变频器、逆变焊机、
  SVG无功补偿
- 新能源光伏逆变器、储能
- 其他工业应用的PCB温度检测

Package Outline



Dimensions in millimeters

Part Numbering System



TO-263 Serises Thermistor Probe

Specifications

Part Number	封 装	零功率电阻 @ 25℃	R25精度 (±%)	B 值	B值精度 (±%)	工作温度范围(℃)
D2103FA2F*	TO-263	10KΩ	1	3950(25/50)	1	-40 to +200
D2103JA2J*	TO-263	10KΩ	5	3950(25/50)	5	-40 to +200
D2103FB1F*	TO-263	10KΩ	1	3435(25/85)	1	-40 to +200
D2103JB1J*	TO-263	10KΩ	5	3435(25/85)	5	-40 to +200

Part No : D2103FA2FC TEMPERATURE VS RESISTANCE TABLE

Resistance	10k Ohms at 25deg. C
Resistance Tolerance	+ / - 1 %
B Value	3950K at 25/50deg. C
B Value Tolerance	+ / - 1 %

Temp. (deg. C)	Rmax (k Ohms)	Rnor (k Ohms)	Rmin (k Ohms)
-40	359.5644	343.6326	328.3739
-39	335.9504	321.2809	307.2213
-38	314.0464	300.5339	287.5741
-37	293.7175	281.266	269.3154
-36	274.8405	263.3624	252.3384
-35	257.3023	246.7177	236.5449
-34	240.9996	231.2355	221.8447
-33	225.8377	216.8273	208.1555
-32	211.7294	203.4118	195.4013
-31	198.5951	190.9144	183.5124
-30	186.3613	179.2666	172.4247
-29	174.9608	168.4053	162.0793
-28	164.3317	158.2726	152.4218
-27	154.417	148.8151	143.4022
-26	145.1643	139.9837	134.9746
-25	136.5254	131.7332	127.0964
-24	128.4558	124.0216	119.7285
-23	120.9146	116.8107	112.8348
-22	113.864	110.0648	106.3818
-21	107.2691	103.7512	100.3387
-20	101.0977	97.8396	94.6771
-19	95.3201	92.302	89.3705
-18	89.9088	87.1124	84.3946
-17	84.8385	82.2471	79.7268
-16	80.0856	77.6837	75.3463
-15	75.6284	73.4018	71.2336
-14	71.4468	69.3823	67.3708
-13	67.522	65.6077	63.7412
-12	63.837	62.0616	60.3295
-11	60.3755	58.7288	57.1212
-10	57.1228	55.5953	54.1032
-9	54.0651	52.648	51.2629
-8	51.1895	49.8747	48.5889
-7	48.4842	47.2643	46.0705
-6	45.9381	44.8062	43.6978

-5	43.5409	42.4906	41.4615
-4	41.2831	40.3086	39.3531
-3	39.1559	38.2516	37.3644
-2	37.1508	36.3117	35.488
-1	35.2603	34.4817	33.7169
0	33.4771	32.7547	32.0447
1	31.7945	31.1243	30.4652
2	30.2064	29.5847	28.9728
3	28.7068	28.1301	27.5623
4	27.2904	26.7556	26.2286
5	25.9521	25.4562	24.9672
6	24.6872	24.2274	23.7738
7	23.4912	23.065	22.6443
8	22.3599	21.965	21.575
9	21.2897	20.9239	20.5622
10	20.2768	19.938	19.6028
11	19.3178	19.0041	18.6937
12	18.4096	18.1193	17.8318
13	17.5493	17.2807	17.0146
14	16.734	16.4857	16.2394
15	15.9612	15.7317	15.504
16	15.2284	15.0164	14.8059
17	14.5333	14.3376	14.1432
18	13.8738	13.6933	13.5139
19	13.2479	13.0816	12.916
20	12.6537	12.5005	12.3479
21	12.0895	11.9485	11.808
22	11.5535	11.4239	11.2946
23	11.0442	10.9252	10.8064
24	10.5602	10.451	10.3419
25	10.1	10	9.9
26	9.6709	9.5709	9.471
27	9.2623	9.1626	9.063
28	8.8732	8.7738	8.6747
29	8.5025	8.4037	8.3052
30	8.1494	8.0512	7.9534
31	7.8128	7.7154	7.6184
32	7.4919	7.3953	7.2993
33	7.1859	7.0903	6.9953
34	6.894	6.7995	6.7056
35	6.6156	6.5221	6.4294
36	6.3498	6.2576	6.166
37	6.0962	6.0051	5.9148

38	5.854	5.7642	5.6752
39	5.6227	5.5342	5.4465
40	5.4018	5.3146	5.2283
41	5.1907	5.1049	5.0199
42	4.989	4.9045	4.821
43	4.7961	4.713	4.6309
44	4.6117	4.53	4.4494
45	4.4354	4.3551	4.2759
46	4.2667	4.1878	4.11
47	4.1053	4.0278	3.9515
48	3.9508	3.8748	3.7999
49	3.803	3.7283	3.6548
50	3.6614	3.5882	3.5161
51	3.5258	3.454	3.3833
52	3.396	3.3255	3.2562
53	3.2715	3.2025	3.1346
54	3.1523	3.0846	3.0181
55	3.038	2.9717	2.9065
56	2.9285	2.8635	2.7996
57	2.8234	2.7597	2.6972
58	2.7227	2.6603	2.599
59	2.626	2.5649	2.5049
60	2.5333	2.4734	2.4147
61	2.4443	2.3856	2.3282
62	2.3589	2.3014	2.2452
63	2.2768	2.2206	2.1656
64	2.1981	2.1431	2.0892
65	2.1224	2.0686	2.0159
66	2.0498	1.997	1.9455
67	1.98	1.9283	1.8779
68	1.9129	1.8623	1.813
69	1.8484	1.7989	1.7507
70	1.7864	1.738	1.6908
71	1.7267	1.6794	1.6332
72	1.6694	1.6231	1.5779
73	1.6142	1.5689	1.5247
74	1.5612	1.5168	1.4736
75	1.5101	1.4667	1.4245
76	1.461	1.4185	1.3772
77	1.4137	1.3722	1.3317
78	1.3681	1.3275	1.288
79	1.3243	1.2845	1.2458
80	1.282	1.2431	1.2053

81	1.2413	1.2033	1.1663
82	1.2021	1.1649	1.1287
83	1.1644	1.1279	1.0926
84	1.1279	1.0923	1.0577
85	1.0928	1.058	1.0241
86	1.059	1.0249	0.9918
87	1.0264	0.993	0.9606
88	0.9949	0.9623	0.9306
89	0.9646	0.9326	0.9016
90	0.9353	0.904	0.8737
91	0.907	0.8764	0.8468
92	0.8797	0.8498	0.8208
93	0.8534	0.8241	0.7958
94	0.828	0.7994	0.7716
95	0.8035	0.7754	0.7483
96	0.7798	0.7523	0.7258
97	0.7569	0.73	0.7041
98	0.7348	0.7085	0.6831
99	0.7134	0.6877	0.6628
100	0.6928	0.6676	0.6433
101	0.6728	0.6482	0.6244
102	0.6536	0.6295	0.6062
103	0.6349	0.6113	0.5885
104	0.6169	0.5938	0.5715
105	0.5995	0.5769	0.555
106	0.5826	0.5605	0.5391
107	0.5663	0.5447	0.5237
108	0.5506	0.5293	0.5089
109	0.5353	0.5145	0.4945
110	0.5206	0.5002	0.4806
111	0.5063	0.4863	0.4671
112	0.4924	0.4729	0.4541
113	0.4791	0.4599	0.4415
114	0.4661	0.4474	0.4293
115	0.4535	0.4352	0.4175
116	0.4414	0.4234	0.4061
117	0.4296	0.412	0.3951
118	0.4182	0.4009	0.3844
119	0.4071	0.3902	0.374
120	0.3964	0.3799	0.364
121	0.386	0.3698	0.3542
122	0.376	0.3601	0.3448
123	0.3662	0.3506	0.3357

124	0.3568	0.3415	0.3269
125	0.3476	0.3326	0.3183
126	0.3387	0.324	0.31
127	0.3301	0.3157	0.3019
128	0.3217	0.3076	0.2941
129	0.3136	0.2998	0.2866
130	0.3057	0.2922	0.2792
131	0.2981	0.2848	0.2721
132	0.2906	0.2776	0.2652
133	0.2834	0.2707	0.2585
134	0.2765	0.264	0.252
135	0.2697	0.2574	0.2457
136	0.2631	0.2511	0.2396
137	0.2567	0.2449	0.2336
138	0.2505	0.2389	0.2278
139	0.2444	0.2331	0.2222
140	0.2386	0.2274	0.2168
141	0.2329	0.222	0.2115
142	0.2273	0.2166	0.2064
143	0.222	0.2114	0.2014
144	0.2167	0.2064	0.1966
145	0.2116	0.2015	0.1919
146	0.2067	0.1968	0.1873
147	0.2019	0.1922	0.1829
148	0.1972	0.1877	0.1786
149	0.1927	0.1833	0.1744
150	0.1883	0.1791	0.1703
151	0.184	0.1749	0.1663
152	0.1798	0.1709	0.1625
153	0.1757	0.167	0.1587
154	0.1718	0.1632	0.1551
155	0.1679	0.1595	0.1515
156	0.1642	0.1559	0.1481
157	0.1605	0.1524	0.1447
158	0.157	0.149	0.1415
159	0.1535	0.1457	0.1383
160	0.1502	0.1425	0.1352
161	0.1469	0.1394	0.1322
162	0.1437	0.1363	0.1293
163	0.1406	0.1333	0.1264
164	0.1376	0.1304	0.1236
165	0.1346	0.1276	0.1209
166	0.1318	0.1249	0.1183

167	0.129	0.1222	0.1158
168	0.1262	0.1196	0.1133
169	0.1236	0.117	0.1108
170	0.121	0.1146	0.1085
171	0.1185	0.1121	0.1062
172	0.116	0.1098	0.1039
173	0.1136	0.1075	0.1017
174	0.1113	0.1053	0.0996
175	0.109	0.1031	0.0975
176	0.1068	0.101	0.0955
177	0.1046	0.0989	0.0935
178	0.1025	0.0969	0.0916
179	0.1004	0.0949	0.0897
180	0.0984	0.093	0.0879
181	0.0965	0.0911	0.0861
182	0.0945	0.0893	0.0843
183	0.0927	0.0875	0.0826
184	0.0909	0.0858	0.081
185	0.0891	0.0841	0.0794
186	0.0873	0.0824	0.0778
187	0.0856	0.0808	0.0762
188	0.084	0.0792	0.0747
189	0.0824	0.0777	0.0733
190	0.0808	0.0762	0.0718
191	0.0793	0.0747	0.0704
192	0.0778	0.0733	0.0691
193	0.0763	0.0719	0.0678
194	0.0749	0.0705	0.0665
195	0.0735	0.0692	0.0652
196	0.0721	0.0679	0.0639
197	0.0707	0.0666	0.0627
198	0.0694	0.0654	0.0616
199	0.0682	0.0642	0.0604
200	0.0669	0.063	0.0593