Technical Specification of Temperature Sensor

Temperature Sensor	MJSPJY-223-3950-1-600-3D	$R_{25℃}$=22KΩ ±1%
		$B_{25/50}$=3950K±1%

1、GENERAL

This specification defines characteristics of a temperature sensor type:
MJSPJY-223-3950-1-600-3D

2、ELECTRICAL CHARACTERISTICS

Item	Specified limits	Test Method and Conditions
2-1. Zero power Resistance:R25	22kΩ ±1% 22kilo ohms±1%	
2-2. B-Value: B25/50	3950k±1%	
2-3. Thermal Dissipation Constant	6Mw/°C	at 25°Cin still air
2-4. Insulation Resistance	100Megohms Min.	By DC 1000V megger
2-5. Operating Temperature Range	-30~125°C -30 to 125°C	
2-6. Storage Temperature Range	-30~125°C -30 to 125°C	

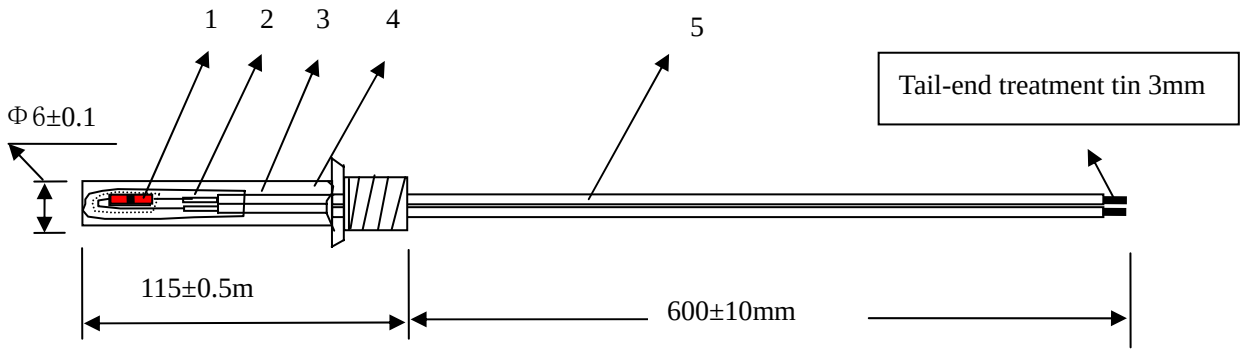
3、MECHANICAL CHARACTERISTICS

Item	Specified limits	Test Method and Conditions
3-1.Pull Test	Must be No Damage	Between the shell and the wire gradually applied 20N (2 kg) tension, and for 10 seconds

4、RELIABILITY

Item	Specified limits	Test Method and Conditions
4-1 high temperature storage	△R25≤±1% △B25/50≤±1%	85℃，1000hours
4-2 low temperature storage	△R25≤±1% △B25/50≤±1%	--40℃，1000hours
4-3. high humidity storage	△R25≤±1% △B25/50≤±1%	60℃ and 95%RH, 1000hours
4-4 temperature cycle test	△R25≤±1% △B25/50≤±1%	-20℃，keep 20minutes then 25℃， keep 5 minutes and then 85℃，keep 20 minutes，circulate 1000 times like this

5、STRUCTURE AND DIMENSION



Sym	Name	Specified Limits Material
1	Thermistor	MJD-**223-3950-1**
2	Under Coating	Insulation material (elastical)
3	Filling Resin	Epoxy Resin
4	Case	Stainless steel shell
5	Lead Wire	UL AWM3266, 26AWG, VW-1SC, temperature 125℃, voltage 300V (Black)

6、Table of Resistance Related to Temperature (R-T Table)

T（℃）	R（KΩ）	T（℃）	R（KΩ）	T（℃）	R（KΩ）	T（℃）	R（KΩ）
-30	382.2610	19	28.8094	68	4.1286	117	0.9540
-29	360.0311	20	27.5275	69	3.9853	118	0.9285
-28	339.2597	21	26.3047	70	3.8478	119	0.9039
-27	319.8411	22	25.1439	71	3.7205	120	0.8800
-26	301.6778	23	24.0417	72	3.5981	121	0.8560
-25	284.6800	24	22.9948	73	3.4803	122	0.8329
-24	268.7196	25	22.0000	74	3.3671	123	0.8105
-23	253.7710	26	21.0644	75	3.2582	124	0.7888
-22	239.7633	27	20.1744	76	3.1524	125	0.7678
-21	226.6308	28	19.3275	77	3.0506		
-20	214.3130	29	18.5214	78	2.9526		
-19	202.2306	30	17.7540	79	2.8584		
-18	190.9162	31	17.0157	80	2.7676		
-17	180.3160	32	16.3127	81	2.6795		
-16	170.3799	33	15.6430	82	2.5946		
-15	161.0620	34	15.0050	83	2.5129		
-14	152.4191	35	14.3968	84	2.4342		
-13	144.3012	36	13.8053	85	2.3584		
-12	136.6729	37	13.2417	86	2.2856		
-11	129.5015	38	12.7046	87	2.2154		
-10	122.7567	39	12.1924	88	2.1477		
-9	116.2720	40	11.7040	89	2.0825		
-8	110.1749	41	11.2374	90	2.0196		
-7	104.4398	42	10.7923	91	1.9597		
-6	99.0429	43	10.3674	92	1.9019		
-5	93.9620	44	9.9618	93	1.8461		
-4	89.1673	45	9.5744	94	1.7922		
-3	84.6500	46	9.2050	95	1.7402		
-2	80.3925	47	8.8520	96	1.6893		
-1	76.3780	48	8.5146	97	1.6402		
0	72.5912	49	8.1921	98	1.5927		
1	68.9201	50	7.8836	99	1.5469		
2	65.4593	51	7.5994	100	1.5026		
3	62.1955	52	7.3270	101	1.4638		
4	59.1163	53	7.0659	102	1.4261		
5	56.2100	54	6.8157	103	1.3896		
6	53.5224	55	6.5758	104	1.3543		
7	50.9812	56	6.3371	105	1.3200		
8	48.5774	57	6.1084	106	1.2829		
9	46.3028	58	5.8893	107	1.2470		
10	44.1496	59	5.6793	108	1.2123		
11	42.0380	60	5.4780	109	1.1787		
12	40.0411	61	5.2867	110	1.1462		
13	38.1521	62	5.1032	111	1.1167		
14	36.3644	63	4.9271	112	1.0881		
15	34.6720	64	4.7581	113	1.0604		
16	33.0871	65	4.5958	114	1.0336		
17	31.5849	66	4.4335	115	1.0076		
18	30.1605	67	4.2779	116	0.9803		