



# THINKING ELECTRONIC INDUSTRIAL CO., LTD.

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## SPECIFICATION FOR APPROVAL

CUSTOMER Codico-Sample shop

CERTIFIED \_\_\_\_\_

MODEL/TYPE \_\_\_\_\_

PART NO. BTSTD101AAB013A (RoHS)

APPLICATION \_\_\_\_\_

CUSTOMER P/N \_\_\_\_\_

ISSUE DATE Apr.7.2026

REV. NO. 1.0

REV. DATE \_\_\_\_\_

FOR CUSTOMER APPROVAL	CHECKED BY
	<i>Hu Feng</i>
	APPROVED BY
	<i>Hu Feng</i>



CUSTOMER: Codico-Sample shop

CUSTOMER P/N :

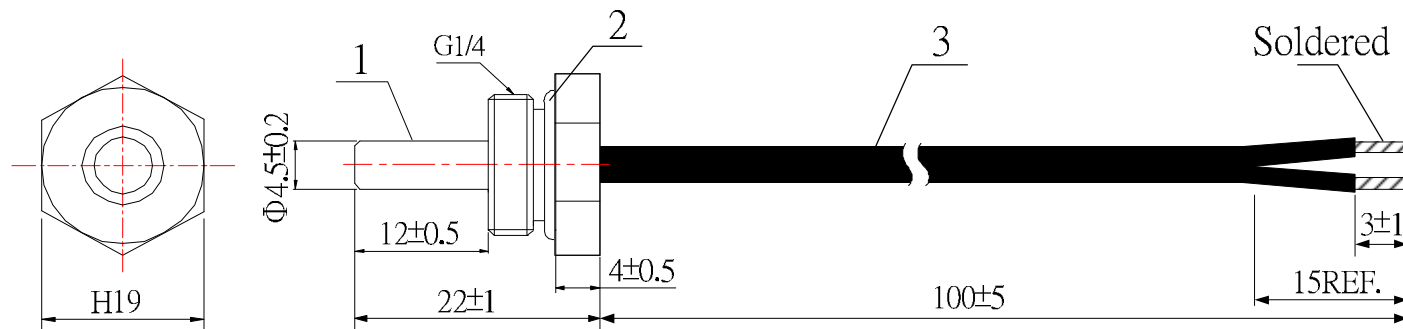
Part No. : BTSTD101AAB013A

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**REVISED RECORD SHEET**

REV. NO	REV. DATE	REVISED CONTENT
1.0	2026/4/7	New Released

A. Material List		
NO.	ITEM	DESCRIPTION
*	ELEMENT	PT-100
1	CAP	Φ4.5*22*H19 Stainless Steel Screw Head
2	O-RING	Φ11.0*2.5 Black sealing ring(EPDM)(120℃)
3	LEAD WIRE	UL4484#26*2C TS black line
B. Electrical Characteristic		
ITEM	VALUE	
R0℃	100Ω ± 0.06% (Class A)	
TCR	3850ppm/K	
Note: The resistor is 100Ω at 0℃, and the line impedance is 0.15Ω/m.		



							Customer	Codico-Sample shop
							Customer P/N	
							Thinking P/N	BTSTD101AAB013A
							Drawing NO.	BTS2604001
							Date	2026/4/7
							Tol: ±mm	Unit: mm Scale:
1.0	2026/4/7	New Released		ZhouShaoXing	Hu Feng	Hu Feng	<i>THINKING ELECTRONIC INDUSTRIAL CO.,LTD</i>	
Rev.	Date	Subjects of Change	ECN.NO	Designed by	Checked by	Approved by		

CUSTOMER: Codico-Sample shop

CUSTOMER P/N :

Part No. : BTSTD101AAB013A

NO	PART NAME	PART P/N	Q'TY	FLAMMABILITY SOLID BURNING CLASS	UL FILE NO
*	ELEMENT	PT-100	1		
1	CAP	Φ4.5*22*H19 Stainless Steel Screw Head	1		
2	O-RING	Φ11.0*2.5 Black sealing ring(EPDM)(120℃)	1		
3	LEAD WIRE	UL4484#26*2C TS black line	1		
REMARK					

Approved by: Hu Feng

Checked by: Hu Feng

Designed by: ZhouShaoXing

**Specification of PT SENSOR for Temperature Measurement and Control**

**PART NO . BTSTD101AAB013A**

**CUSTOMER P/N .**

**1. Electrical characteristics**

	Parameter	Symbol	Test Conditions	Tolerance	Unit.
a.	Resistance At 0°C	R <sub>0</sub>	R <sub>0</sub> °C = 100Ω	Class A	Ω
b.	TCR		-----	3850	ppm/K

**2. Maximun Ratings**

	Parameter	Specification	Unit
a.	Operation Temperature Range	-40 ----- +150	°C

## PT100 Temperature vs resistance

Tolerance class: A

Pt100 TC 3850ppm

Permissible deviation :  $Dt = (0.15^{\circ}\text{C} + 0.002|t|)$

Temperature	Resistance Rt	Sensibility	Permissible deviation	
$^{\circ}\text{C}$	W	$\frac{W}{^{\circ}\text{C}}$	W	$^{\circ}\text{C}$
-40	84.27	0.396	0.091	0.230
-39	84.67	0.396	0.090	0.228
-38	85.06	0.395	0.089	0.226
-37	85.46	0.395	0.089	0.224
-36	85.85	0.395	0.088	0.222
-35	86.25	0.395	0.087	0.220
-34	86.64	0.395	0.086	0.218
-33	87.04	0.395	0.085	0.216
-32	87.43	0.395	0.084	0.214
-31	87.83	0.395	0.084	0.212
-30	88.22	0.394	0.083	0.210
-29	88.62	0.394	0.082	0.208
-28	89.01	0.394	0.081	0.206
-27	89.40	0.394	0.080	0.204
-26	89.80	0.394	0.080	0.202
-25	90.19	0.394	0.079	0.200
-24	90.59	0.394	0.078	0.198
-23	90.98	0.394	0.077	0.196
-22	91.37	0.393	0.076	0.194
-21	91.77	0.393	0.076	0.192
-20	92.16	0.393	0.075	0.190
-19	92.55	0.393	0.074	0.188
-18	92.95	0.393	0.073	0.186
-17	93.34	0.393	0.072	0.184
-16	93.73	0.393	0.071	0.182
-15	94.12	0.393	0.071	0.180
-14	94.52	0.392	0.070	0.178
-13	94.91	0.392	0.069	0.176
-12	95.30	0.392	0.068	0.174
-11	95.69	0.392	0.067	0.172
-10	96.09	0.392	0.067	0.170
-9	96.48	0.392	0.066	0.168
-8	96.87	0.392	0.065	0.166
-7	97.26	0.392	0.064	0.164
-6	97.65	0.392	0.063	0.162
-5	98.04	0.391	0.063	0.160
-4	98.44	0.391	0.062	0.158
-3	98.83	0.391	0.061	0.156
-2	99.22	0.391	0.060	0.154
-1	99.61	0.391	0.059	0.152
0	100.00	0.391	0.059	0.150
1	100.39	0.391	0.059	0.152
2	100.78	0.391	0.060	0.154
3	101.17	0.390	0.061	0.156
4	101.56	0.390	0.062	0.158
5	101.95	0.390	0.062	0.160
6	102.34	0.390	0.063	0.162
7	102.73	0.390	0.064	0.164
8	103.12	0.390	0.065	0.166
9	103.51	0.390	0.065	0.168

## PT100 Temperature vs resistance

Tolerance class: A

Pt100 TC 3850ppm

Permissible deviation :  $Dt = ( 0.15^{\circ}\text{C} + 0.002|t| )$

10	103.90	0.390	0.066	0.170
11	104.29	0.390	0.067	0.172
12	104.68	0.389	0.068	0.174
13	105.07	0.389	0.069	0.176
14	105.46	0.389	0.069	0.178
15	105.85	0.389	0.070	0.180
16	106.24	0.389	0.071	0.182
17	106.63	0.389	0.072	0.184
18	107.02	0.389	0.072	0.186
19	107.40	0.389	0.073	0.188
20	107.79	0.389	0.074	0.190
21	108.18	0.388	0.075	0.192
22	108.57	0.388	0.075	0.194
23	108.96	0.388	0.076	0.196
24	109.35	0.388	0.077	0.198
25	109.73	0.388	0.078	0.200
26	110.12	0.388	0.078	0.202
27	110.51	0.388	0.079	0.204
28	110.90	0.388	0.080	0.206
29	111.29	0.387	0.081	0.208
30	111.67	0.387	0.081	0.210
31	112.06	0.387	0.082	0.212
32	112.45	0.387	0.083	0.214
33	112.83	0.387	0.084	0.216
34	113.22	0.387	0.084	0.218
35	113.61	0.387	0.085	0.220
36	114.00	0.387	0.086	0.222
37	114.38	0.387	0.087	0.224
38	114.77	0.386	0.087	0.226
39	115.15	0.386	0.088	0.228
40	115.54	0.386	0.089	0.230
41	115.93	0.386	0.090	0.232
42	116.31	0.386	0.090	0.234
43	116.70	0.386	0.091	0.236
44	117.08	0.386	0.092	0.238
45	117.47	0.386	0.093	0.240
46	117.86	0.386	0.093	0.242
47	118.24	0.385	0.094	0.244
48	118.63	0.385	0.095	0.246
49	119.01	0.385	0.096	0.248
50	119.40	0.385	0.096	0.250
51	119.78	0.385	0.097	0.252
52	120.17	0.385	0.098	0.254
53	120.55	0.385	0.098	0.256
54	120.94	0.385	0.099	0.258
55	121.32	0.384	0.100	0.260
56	121.71	0.384	0.101	0.262
57	122.09	0.384	0.101	0.264
58	122.47	0.384	0.102	0.266
59	122.86	0.384	0.103	0.268
60	123.24	0.384	0.104	0.270
61	123.63	0.384	0.104	0.272
62	124.01	0.384	0.105	0.274

## PT100 Temperature vs resistance

Tolerance class: A

Pt100 TC 3850ppm

Permissible deviation :  $Dt = (0.15^{\circ}\text{C} + 0.002|t|)$

63	124.39	0.384	0.106	0.276
64	124.78	0.383	0.107	0.278
65	125.16	0.383	0.107	0.280
66	125.54	0.383	0.108	0.282
67	125.93	0.383	0.109	0.284
68	126.31	0.383	0.110	0.286
69	126.69	0.383	0.110	0.288
70	127.08	0.383	0.111	0.290
71	127.46	0.383	0.112	0.292
72	127.84	0.383	0.112	0.294
73	128.22	0.382	0.113	0.296
74	128.61	0.382	0.114	0.298
75	128.99	0.382	0.115	0.300
76	129.37	0.382	0.115	0.302
77	129.75	0.382	0.116	0.304
78	130.13	0.382	0.117	0.306
79	130.52	0.382	0.118	0.308
80	130.90	0.382	0.118	0.310
81	131.28	0.381	0.119	0.312
82	131.66	0.381	0.120	0.314
83	132.04	0.381	0.120	0.316
84	132.42	0.381	0.121	0.318
85	132.80	0.381	0.122	0.320
86	133.18	0.381	0.123	0.322
87	133.57	0.381	0.123	0.324
88	133.95	0.381	0.124	0.326
89	134.33	0.381	0.125	0.328
90	134.71	0.380	0.126	0.330
91	135.09	0.380	0.126	0.332
92	135.47	0.380	0.127	0.334
93	135.85	0.380	0.128	0.336
94	136.23	0.380	0.128	0.338
95	136.61	0.380	0.129	0.340
96	136.99	0.380	0.130	0.342
97	137.37	0.380	0.131	0.344
98	137.75	0.380	0.131	0.346
99	138.13	0.379	0.132	0.348
100	138.51	0.379	0.133	0.350
101	138.88	0.379	0.133	0.352
102	139.26	0.379	0.134	0.354
103	139.64	0.379	0.135	0.356
104	140.02	0.379	0.136	0.358
105	140.40	0.379	0.136	0.360
106	140.78	0.379	0.137	0.362
107	141.16	0.378	0.138	0.364
108	141.54	0.378	0.138	0.366
109	141.91	0.378	0.139	0.368
110	142.29	0.378	0.140	0.370
111	142.67	0.378	0.141	0.372
112	143.05	0.378	0.141	0.374
113	143.43	0.378	0.142	0.376
114	143.80	0.378	0.143	0.378
115	144.18	0.378	0.143	0.380

## PT100 Temperature vs resistance

Tolerance class: A

Pt100 TC 3850ppm

Permissible deviation :  $Dt = ( 0.15^{\circ}\text{C} + 0.002|t| )$

116	144.56	0.377	0.144	0.382
117	144.94	0.377	0.145	0.384
118	145.31	0.377	0.146	0.386
119	145.69	0.377	0.146	0.388
120	146.07	0.377	0.147	0.390
121	146.44	0.377	0.148	0.392
122	146.82	0.377	0.148	0.394
123	147.20	0.377	0.149	0.396
124	147.57	0.377	0.150	0.398
125	147.95	0.376	0.151	0.400
126	148.33	0.376	0.151	0.402
127	148.70	0.376	0.152	0.404
128	149.08	0.376	0.153	0.406
129	149.46	0.376	0.153	0.408
130	149.83	0.376	0.154	0.410
131	150.21	0.376	0.155	0.412
132	150.58	0.376	0.155	0.414
133	150.96	0.375	0.156	0.416
134	151.33	0.375	0.157	0.418
135	151.71	0.375	0.158	0.420
136	152.08	0.375	0.158	0.422
137	152.46	0.375	0.159	0.424
138	152.83	0.375	0.160	0.426
139	153.21	0.375	0.160	0.428
140	153.58	0.375	0.161	0.430
141	153.96	0.375	0.162	0.432
142	154.33	0.374	0.163	0.434
143	154.71	0.374	0.163	0.436
144	155.08	0.374	0.164	0.438
145	155.46	0.374	0.165	0.440
146	155.83	0.374	0.165	0.442
147	156.20	0.374	0.166	0.444
148	156.58	0.374	0.167	0.446
149	156.95	0.374	0.167	0.448
150	157.33	0.374	0.168	0.450