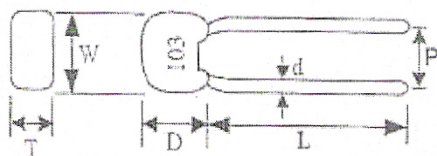


◆ **PART NO. : ENRHT102J2950HSB30**

◆ **FEATURES**

- Low cost, high stability
- Radial type : S - straight wire, L - formed wire
- Temperature sensing and control, compensation, measurement
- Dimension can be discussed

◆ **SHAPE & DIMENSIONS**



Unit : mm

Item	W (mm)	D (mm)	L (mm)	d (mm)	P (mm)	T (mm)
Max.	3.5	4.0	32.0	0.52	3.0	2.5
Min.	---	---	29.0	0.48	2.0	---

a. Material of coating : EPOXY

b. Color of coating : BLUE

c. Material of Leads : TINNED COPPER WIRES

◆ **ELECTRICAL CHARACTERISTICS**

Style	Symbol	Condition	Specification
Resistance at Ta	R	Ta = 25 °C	1 K Ω ± 5 %
B Constant	B	25 °C / 85 °C	2950 K ± 3 %
Thermal Time Constant	C	Ta = 25 °C	6.5 sec
Thermal Dissipation Constant	T	Ta = 25 °C	3 ~ 4 mW/°C
Maximum Power Rating*	P _{max}	Ta = 25 °C → 125 °C	300 ~ 400 mW
Operating Temp. Range	--	--	- 40 °C ~ 125 °C

*Maximum Power Rating = Thermal Dissipation Constant × (Max. Operating Temp.(125°C) - 25°C)

◆ RELIABILITY TEST

Performance	Test Method	$\Delta R_{25} / R_{25}$
Resistance to Soldering Heat	Electrical soldering iron 400°C for 5 sec	Max.± 3 %
Humidity	85 ± 5 °C , 85 % RH x 500 hours	Max.± 3 %
Thermal shock	(- 40°Cx30min → 85°Cx30min) x 100 times	Max.± 3 %
High temperature storage	85 ± 5 °C x 1000 hours	Max.± 3 %
Low temperature storage	- 40 ± 5 °C x 1000 hours	Max.± 3 %

◆ STORAGE CONDITIONS

1. Storage Temperature : - 10 °C ~ + 40 °C .
2. Relative humidity : 30 ~ 75 % RH.
3. Thermistor must be kept away from sunshine and stored in a non-corrosive atmosphere.
4. Period of Storage : 1 year.

◆ ORDERING INFORMATION

ENR HT3 102 J 2950 H S B 30
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

2. Disk Size (dimmeter) : HT3 : 3 mm (3Φ) ; HT5 : 5 mm (5Φ).
3. Resistance at 25 °C : 102 = $10 \times 10^2 = 1,000 (\Omega)$.
4. Tolerance of R : F:±1% ; G:±2% ; H:±3% ; J:±5% ; K:±10%.
5. B value (K).
6. Tolerance of B : F:±1% ; G:±2% ; H:±3% ; J:±5%.
7. Wire type : S : Straight ; L : Forming.
8. Package : B : Bulk ; T : Taping.
9. Length (All) : 30 = 30 mm.

Resistance-Temperature CharacteristicsPart No. : **ENRHT3102J2950HSB30**

R25 :	1,000	Ω	$\pm$	5%
B25/85 :	2950	K	$\pm$	3%

Temperature (°C)	Resistance (Ω)			Temp. Coef. (%/°C)	Resist. Tol. (%)		Temp. Tol. (°C)	
	MIN.	CENTER	MAX.		MIN.	MAX.	MIN.	MAX.
-40	12591	14356	16328	-5.05	-12.30	13.74	-2.72	2.43
-39	11991	13651	15503	-5.02	-12.16	13.56	-2.70	2.42
-38	11423	12985	14725	-4.98	-12.03	13.39	-2.69	2.41
-37	10885	12356	13990	-4.95	-11.90	13.23	-2.67	2.40
-36	10377	11761	13297	-4.92	-11.77	13.06	-2.66	2.39
-35	9895	11199	12643	-4.88	-11.64	12.89	-2.64	2.38
-34	9439	10667	12024	-4.85	-11.51	12.73	-2.62	2.37
-33	9006	10163	11440	-4.82	-11.38	12.56	-2.61	2.36
-32	8596	9687	10888	-4.79	-11.26	12.40	-2.59	2.35
-31	8208	9236	10366	-4.75	-11.13	12.24	-2.58	2.34
-30	7839	8808	9872	-4.72	-11.00	12.08	-2.56	2.33
-29	7489	8403	9405	-4.69	-10.88	11.92	-2.54	2.32
-28	7157	8020	8963	-4.66	-10.75	11.77	-2.53	2.31
-27	6842	7656	8545	-4.63	-10.63	11.61	-2.51	2.30
-26	6543	7311	8148	-4.60	-10.50	11.46	-2.49	2.29
-25	6258	6983	7773	-4.57	-10.38	11.30	-2.48	2.27
-24	5988	6673	7417	-4.53	-10.26	11.15	-2.46	2.26
-23	5731	6378	7079	-4.50	-10.14	11.00	-2.44	2.25
-22	5487	6098	6760	-4.47	-10.02	10.85	-2.43	2.24
-21	5255	5832	6456	-4.44	-9.89	10.70	-2.41	2.23
-20	5034	5579	6168	-4.41	-9.78	10.56	-2.39	2.21
-19	4824	5339	5895	-4.39	-9.66	10.41	-2.37	2.20
-18	4623	5111	5635	-4.36	-9.54	10.27	-2.36	2.19
-17	4433	4894	5389	-4.33	-9.42	10.12	-2.34	2.18
-16	4251	4687	5155	-4.30	-9.30	9.98	-2.32	2.16
-15	4078	4491	4932	-4.27	-9.19	9.84	-2.30	2.15
-14	3913	4303	4721	-4.24	-9.07	9.70	-2.29	2.14
-13	3756	4125	4520	-4.21	-8.95	9.56	-2.27	2.13
-12	3606	3956	4328	-4.18	-8.84	9.42	-2.25	2.11
-11	3463	3794	4146	-4.16	-8.73	9.29	-2.23	2.10
-10	3327	3640	3973	-4.13	-8.61	9.15	-2.22	2.09
-9	3196	3493	3808	-4.10	-8.50	9.02	-2.20	2.07
-8	3072	3353	3651	-4.08	-8.39	8.88	-2.18	2.06
-7	2953	3220	3502	-4.05	-8.27	8.75	-2.16	2.04
-6	2840	3093	3359	-4.02	-8.16	8.62	-2.14	2.03
-5	2732	2971	3223	-4.00	-8.05	8.49	-2.12	2.02
-4	2628	2855	3094	-3.97	-7.94	8.36	-2.11	2.00
-3	2529	2744	2970	-3.94	-7.83	8.23	-2.09	1.99
-2	2435	2639	2852	-3.92	-7.73	8.10	-2.07	1.97
-1	2344	2538	2740	-3.89	-7.62	7.97	-2.05	1.96

Resistance-Temperature CharacteristicsPart No. : **ENRHT3102J2950HSB30**

R25 :	1,000	Ω	$\pm$	5%
B25/85 :	2950	K	$\pm$	3%

Temperature (°C)	Resistance (Ω)			Temp. Coef. (%/°C)	Resist. Tol. (%)		Temp. Tol. (°C)	
	MIN.	CENTER	MAX.		MIN.	MAX.	MIN.	MAX.
0	2258	2441	2633	-3.87	-7.51	7.85	-2.03	1.94
1	2175	2349	2530	-3.84	-7.40	7.72	-2.01	1.93
2	2096	2261	2432	-3.82	-7.30	7.60	-1.99	1.91
3	2020	2176	2339	-3.79	-7.19	7.48	-1.97	1.90
4	1947	2096	2250	-3.77	-7.09	7.36	-1.95	1.88
5	1877	2018	2164	-3.74	-6.98	7.24	-1.93	1.87
6	1811	1944	2083	-3.72	-6.88	7.12	-1.91	1.85
7	1747	1874	2005	-3.69	-6.77	7.00	-1.89	1.83
8	1686	1806	1930	-3.67	-6.67	6.88	-1.87	1.82
9	1627	1741	1859	-3.65	-6.57	6.76	-1.85	1.80
10	1570	1679	1791	-3.62	-6.47	6.64	-1.83	1.78
11	1516	1619	1725	-3.60	-6.36	6.53	-1.81	1.77
12	1464	1562	1663	-3.58	-6.26	6.41	-1.79	1.75
13	1415	1508	1603	-3.55	-6.16	6.30	-1.77	1.73
14	1367	1455	1545	-3.53	-6.06	6.19	-1.75	1.72
15	1321	1405	1490	-3.51	-5.96	6.08	-1.73	1.70
16	1277	1357	1437	-3.49	-5.87	5.96	-1.71	1.68
17	1235	1310	1387	-3.46	-5.77	5.85	-1.69	1.66
18	1194	1266	1338	-3.44	-5.67	5.74	-1.67	1.65
19	1155	1223	1292	-3.42	-5.57	5.64	-1.65	1.63
20	1117	1182	1247	-3.40	-5.48	5.53	-1.63	1.61
21	1081	1143	1205	-3.38	-5.38	5.42	-1.61	1.59
22	1046	1105	1164	-3.36	-5.28	5.31	-1.58	1.57
23	1013	1069	1124	-3.33	-5.19	5.21	-1.56	1.56
24	981	1034	1086	-3.31	-5.09	5.10	-1.54	1.54
25	950	1000	1050	-3.29	-5.00	5.00	-1.52	1.52
26	918	968	1017	-3.27	-5.09	5.10	-1.56	1.56
27	888	937	985	-3.25	-5.19	5.21	-1.60	1.59
28	859	907	955	-3.23	-5.28	5.31	-1.64	1.63
29	831	878	926	-3.21	-5.37	5.41	-1.68	1.67
30	804	850	897	-3.19	-5.46	5.51	-1.73	1.71
31	778	824	870	-3.17	-5.55	5.61	-1.77	1.75
32	753	798	844	-3.15	-5.64	5.71	-1.81	1.79
33	729	773	818	-3.13	-5.73	5.81	-1.86	1.83
34	706	750	794	-3.11	-5.82	5.91	-1.90	1.87
35	684	727	770	-3.09	-5.91	6.01	-1.94	1.91
36	662	705	748	-3.08	-5.99	6.11	-1.99	1.95
37	642	683	726	-3.06	-6.08	6.21	-2.03	1.99
38	622	663	705	-3.04	-6.16	6.30	-2.07	2.03
39	603	643	684	-3.02	-6.25	6.40	-2.12	2.07

Resistance-Temperature CharacteristicsPart No. : **ENRHT3102J2950HSB30**

R25 :	1,000	Ω	$\pm$	5%
B25/85 :	2950	K	$\pm$	3%

Temperature (°C)	Resistance (Ω)			Temp. Coef. (%/°C)	Resist. Tol. (%)		Temp. Tol. (°C)	
	MIN.	CENTER	MAX.		MIN.	MAX.	MIN.	MAX.
40	584	624	665	-3.00	-6.33	6.50	-2.16	2.11
41	567	606	646	-2.98	-6.42	6.59	-2.21	2.15
42	550	588	627	-2.97	-6.50	6.69	-2.26	2.19
43	533	571	609	-2.95	-6.59	6.78	-2.30	2.23
44	517	554	592	-2.93	-6.67	6.88	-2.35	2.28
45	502	538	576	-2.91	-6.75	6.97	-2.39	2.32
46	487	523	560	-2.89	-6.83	7.06	-2.44	2.36
47	473	508	544	-2.88	-6.91	7.16	-2.49	2.40
48	459	494	529	-2.86	-6.99	7.25	-2.53	2.44
49	446	480	515	-2.84	-7.07	7.34	-2.58	2.49
50	433	466	501	-2.83	-7.15	7.43	-2.63	2.53
51	421	453	487	-2.81	-7.23	7.52	-2.68	2.57
52	409	441	474	-2.79	-7.31	7.61	-2.73	2.62
53	397	429	462	-2.78	-7.38	7.70	-2.77	2.66
54	386	417	450	-2.76	-7.46	7.79	-2.82	2.70
55	375	406	438	-2.74	-7.54	7.88	-2.87	2.75
56	365	395	426	-2.73	-7.61	7.97	-2.92	2.79
57	355	384	415	-2.71	-7.69	8.06	-2.97	2.84
58	345	374	404	-2.70	-7.76	8.14	-3.02	2.88
59	336	364	394	-2.68	-7.84	8.23	-3.07	2.92
60	326	354	384	-2.66	-7.91	8.32	-3.12	2.97
61	318	345	374	-2.65	-7.98	8.41	-3.17	3.01
62	309	336	365	-2.63	-8.06	8.49	-3.22	3.06
63	301	327	356	-2.62	-8.13	8.58	-3.28	3.11
64	293	319	347	-2.60	-8.20	8.66	-3.33	3.15
65	285	311	338	-2.59	-8.27	8.75	-3.38	3.20
66	278	303	330	-2.57	-8.34	8.83	-3.43	3.24
67	270	295	322	-2.56	-8.41	8.91	-3.49	3.29
68	263	288	314	-2.54	-8.48	9.00	-3.54	3.34
69	257	281	306	-2.53	-8.55	9.08	-3.59	3.38
70	250	274	299	-2.51	-8.62	9.16	-3.64	3.43
71	244	267	292	-2.50	-8.69	9.25	-3.70	3.48
72	237	260	285	-2.49	-8.76	9.33	-3.75	3.52
73	231	254	278	-2.47	-8.83	9.41	-3.81	3.57
74	226	248	271	-2.46	-8.89	9.49	-3.86	3.62
75	220	242	265	-2.44	-8.96	9.57	-3.92	3.67
76	215	236	259	-2.43	-9.03	9.65	-3.97	3.72
77	209	230	253	-2.42	-9.09	9.73	-4.03	3.76
78	204	225	247	-2.40	-9.16	9.81	-4.08	3.81
79	199	219	241	-2.39	-9.23	9.89	-4.14	3.86

Resistance-Temperature CharacteristicsPart No. : **ENRHT3102J2950HSB30**

R25 :	1,000	Ω	$\pm$	5%
B25/85 :	2950	K	$\pm$	3%

Temperature (°C)	Resistance (Ω)			Temp. Coef. (%/°C)	Resist. Tol. (%)		Temp. Tol. (°C)	
	MIN.	CENTER	MAX.		MIN.	MAX.	MIN.	MAX.
80	194	214	236	-2.38	-9.29	9.97	-4.20	3.91
81	190	209	230	-2.36	-9.35	10.04	-4.25	3.96
82	185	204	225	-2.35	-9.42	10.12	-4.31	4.01
83	181	200	220	-2.34	-9.48	10.20	-4.37	4.06
84	176	195	215	-2.32	-9.55	10.28	-4.42	4.11
85	172	191	210	-2.31	-9.61	10.35	-4.48	4.16
86	168	186	206	-2.30	-9.67	10.43	-4.54	4.21
87	164	182	201	-2.29	-9.73	10.51	-4.60	4.26
88	161	178	197	-2.27	-9.79	10.58	-4.66	4.31
89	157	174	192	-2.26	-9.86	10.66	-4.72	4.36
90	153	170	188	-2.25	-9.92	10.73	-4.77	4.41
91	150	166	184	-2.24	-9.98	10.81	-4.83	4.46
92	146	163	180	-2.22	-10.04	10.88	-4.89	4.52
93	143	159	176	-2.21	-10.10	10.95	-4.95	4.57
94	140	156	173	-2.20	-10.16	11.03	-5.01	4.62
95	137	152	169	-2.19	-10.22	11.10	-5.08	4.67
96	134	149	166	-2.18	-10.27	11.17	-5.14	4.72
97	131	146	162	-2.16	-10.33	11.25	-5.20	4.78
98	128	143	159	-2.15	-10.39	11.32	-5.26	4.83
99	125	140	156	-2.14	-10.45	11.39	-5.32	4.88
100	122	137	152	-2.13	-10.51	11.46	-5.38	4.93
101	120	134	149	-2.12	-10.56	11.53	-5.45	4.99
102	117	131	146	-2.11	-10.62	11.60	-5.51	5.04
103	115	128	143	-2.10	-10.68	11.67	-5.57	5.10
104	112	126	140	-2.08	-10.73	11.74	-5.63	5.15
105	110	123	138	-2.07	-10.79	11.81	-5.70	5.20
106	107	121	135	-2.06	-10.84	11.88	-5.76	5.26
107	105	118	132	-2.05	-10.90	11.95	-5.83	5.31
108	103	116	130	-2.04	-10.95	12.02	-5.89	5.37
109	101	113	127	-2.03	-11.01	12.09	-5.96	5.42
110	99	111	125	-2.02	-11.06	12.16	-6.02	5.48
111	97	109	122	-2.01	-11.11	12.22	-6.09	5.53
112	95	107	120	-2.00	-11.17	12.29	-6.15	5.59
113	93	105	118	-1.99	-11.22	12.36	-6.22	5.65
114	91	103	115	-1.98	-11.27	12.42	-6.28	5.70
115	89	101	113	-1.97	-11.33	12.49	-6.35	5.76
116	87	99	111	-1.96	-11.38	12.56	-6.42	5.82
117	86	97	109	-1.95	-11.43	12.62	-6.49	5.87
118	84	95	107	-1.94	-11.48	12.69	-6.55	5.93
119	82	93	105	-1.93	-11.53	12.75	-6.62	5.99

Resistance-Temperature CharacteristicsPart No. : ENRHT3102J2950HSB30

R25 :	<u>1,000</u>	Ω	$\pm$	<u>5%</u>
B25/85 :	<u>2950</u>	K	$\pm$	<u>3%</u>

Temperature (°C)	Resistance (Ω)			Temp. Coef. (%/°C)	Resist. Tol. (%)		Temp. Tol. (°C)	
	MIN.	CENTER	MAX.		MIN.	MAX.	MIN.	MAX.
120	81	91	103	-1.92	-11.58	12.82	-6.69	6.04
121	79	90	101	-1.91	-11.64	12.88	-6.76	6.10
122	78	88	99	-1.90	-11.69	12.95	-6.83	6.16
123	76	86	97	-1.89	-11.74	13.01	-6.89	6.22
124	75	85	96	-1.88	-11.79	13.08	-6.96	6.28
125	73	83	94	-1.87	-11.84	13.14	-7.03	6.34