

# SURFACE MOUNT TYPE THERMISTOR

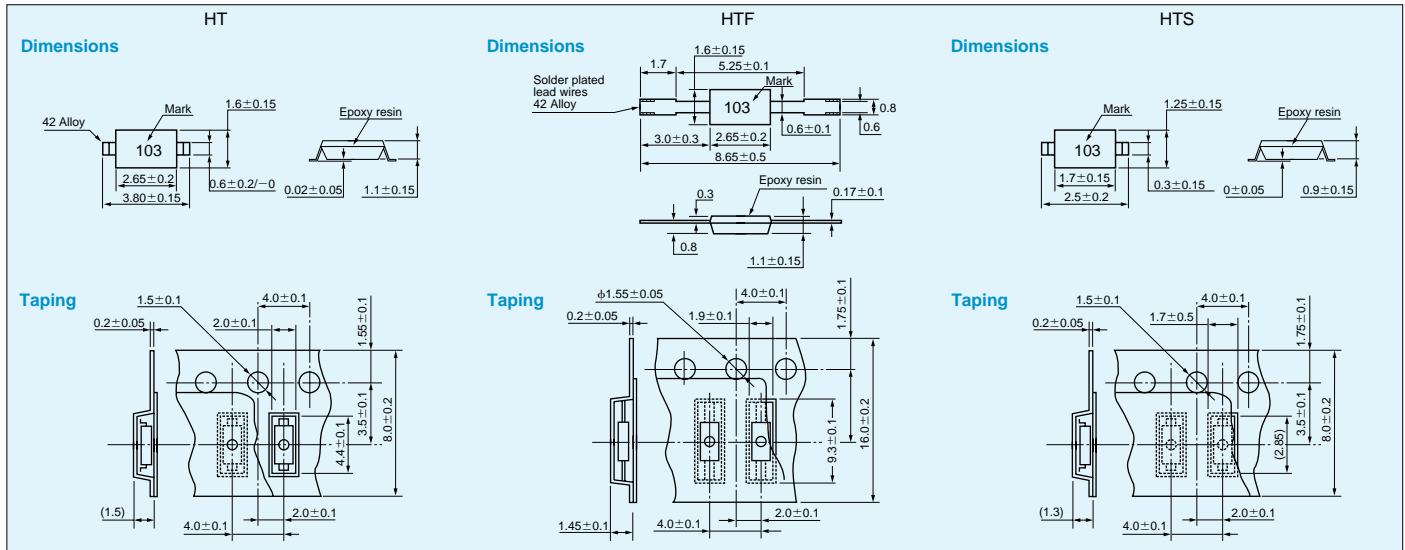
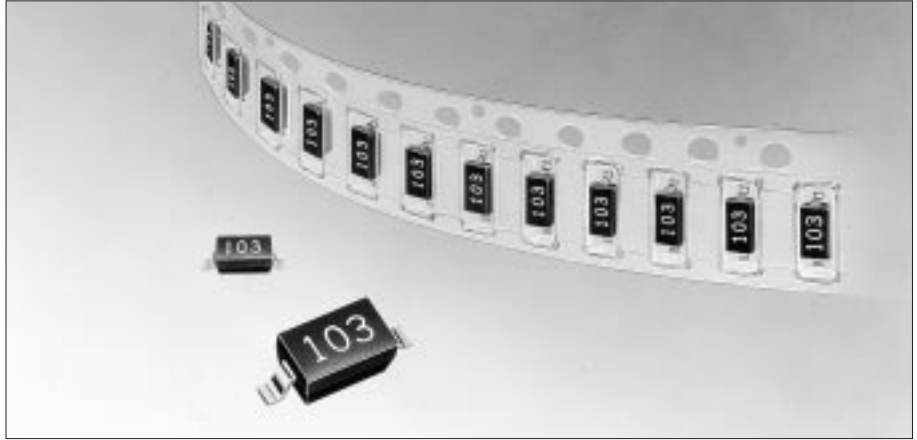
## HT THERMISTOR

HT thermistors are an entirely new type of thermistor for surface mounting (by reflow soldering) and were acquired from breakthrough advancements in technology. Our HT thermistors are adapted metal electrodes packaged in a resin mold, unlike conventional chip thermistors, and can offer  $\pm 2\%$  tolerance for a resistance value at  $25^\circ\text{C}$ .

HT series (SMD Thermistor) is not only compact-surface mounting type but also highly accurate as well as highly reliable.

### Part number

<b>103 HT</b>	<b>-□□</b>	<b>-TP</b>
	Shape	Tolerance of $R_{25}$ 1P: $\pm 1\%$ 2P: $\pm 2\%$
		Taping HTF only
		Rated zero-power resistance at $25^\circ\text{C}$ 103: $10\text{k}\Omega$



Minimum quantity: 3000pcs/reel Unit (mm)

### Specifications

Part No.	$R_{25}$ *1	B value*2	Dissipation factor (mW/°C)	Thermal time constant (s)*3	Rated power at $25^\circ\text{C}$ (mW)	Operating temp. range ( $^\circ\text{C}$ )
302HT(F)	$3.0\text{k}\Omega \pm 2\%$	$3860\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 125$
502HT(F)	$5.0\text{k}\Omega \pm 2\%$	$3860\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 125$
103HT(F)	$10.0\text{k}\Omega \pm 2\%$	$3435\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 100$
203HT(F)	$20.0\text{k}\Omega \pm 2\%$	$3760\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 125$
303HT(F)	$30.0\text{k}\Omega \pm 2\%$	$3760\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 125$
503HT(F)	$50.0\text{k}\Omega \pm 2\%$	$4055\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 125$
104HT(F)	$100.0\text{k}\Omega \pm 2\%$	$4390\text{K} \pm 1\%$	1.0	8.0	5.0	$-50 \sim 125$
103HTS	$10.0\text{k}\Omega \pm 2\%$	$3435\text{K} \pm 1\%$	1.0	6.0	5.0	$-50 \sim 100$
503HTS	$50.0\text{k}\Omega \pm 2\%$	$4055\text{K} \pm 1\%$	1.0	6.0	5.0	$-50 \sim 125$
104HTS	$100.0\text{k}\Omega \pm 2\%$	$4390\text{K} \pm 1\%$	1.0	6.0	5.0	$-50 \sim 125$

\*1  $R_{25}$ : Rated zero-power resistance value at  $25^\circ\text{C}$ ,  $\pm 1\%$  and  $3\%$  are also available.

\*2 B value: determined by rated zero-power resistance at  $25^\circ\text{C}$  and  $85^\circ\text{C}$ .

\*3 Time when thermistor temperature reaches 63.2% of the temperature difference. The value is measured in the air.

### Resistance-Temperature

Temperature ( $^\circ\text{C}$ )	Type								Temperature ( $^\circ\text{C}$ )	Type							
	302HT	502HT	103HT	203HT	303HT	503HT	104HT	302HT		502HT	103HT	203HT	303HT	503HT	104HT		
-50	182.1	303.4	367.7	1026	1539	3135	9584	50	1.109	1.849	4.147	7.632	11.45	17.93	32.51		
-40	93.35	155.6	204.7	540.5	810.8	1602	4572	60	0.7744	1.291	3.011	5.380	8.070	12.33	21.61		
-30	49.85	83.09	118.5	296.7	445.1	855.0	2282	70	0.5513	0.9189	2.224	3.861	5.792	8.588	14.66		
-20	27.75	46.25	71.02	169.2	253.8	474.4	1191	80	0.4000	0.6667	1.668	2.815	4.223	6.064	10.13		
-10	16.02	26.70	43.67	99.85	149.8	272.7	647.2	90	0.2951	0.4918	1.267	2.083	3.125	4.338	7.135		
0	9.541	15.90	27.70	60.87	91.31	161.9	365.0	100	0.2210	0.3683	0.9753	1.564	2.346	3.142	5.111		
10	5.876	9.793	18.07	38.21	57.32	99.13	212.5	110	0.1680	0.2800		1.190	1.785	2.302	3.720		
20	3.728	6.214	12.11	24.66	36.99	62.38	127.7	120	0.1295	0.2158		0.9159	1.374	1.705	2.746		
30	2.431	4.051	8.301	16.31	24.47	40.24	78.88	125	0.1142	0.1903		0.8067	1.210	1.472	2.371		
40	1.623	2.705	5.811	11.04	16.56	26.58	50.03										

Unit (k $\Omega$ )