

# AT Thermistor Series (high accuracy type)

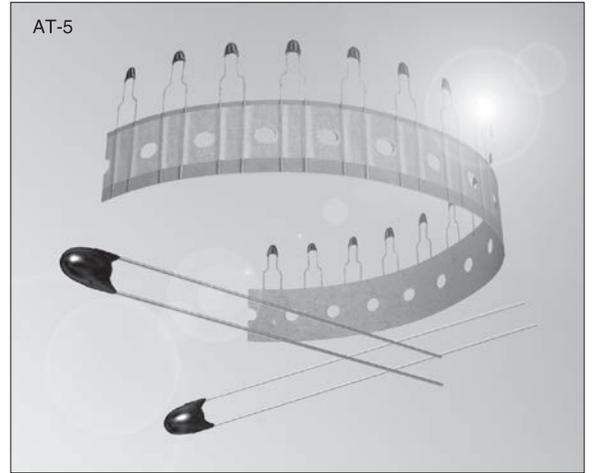
## AT THERMISTOR

The AT thermistor series features a high accuracy ( $\pm 1\%$ ) for both the resistance and the B-value.

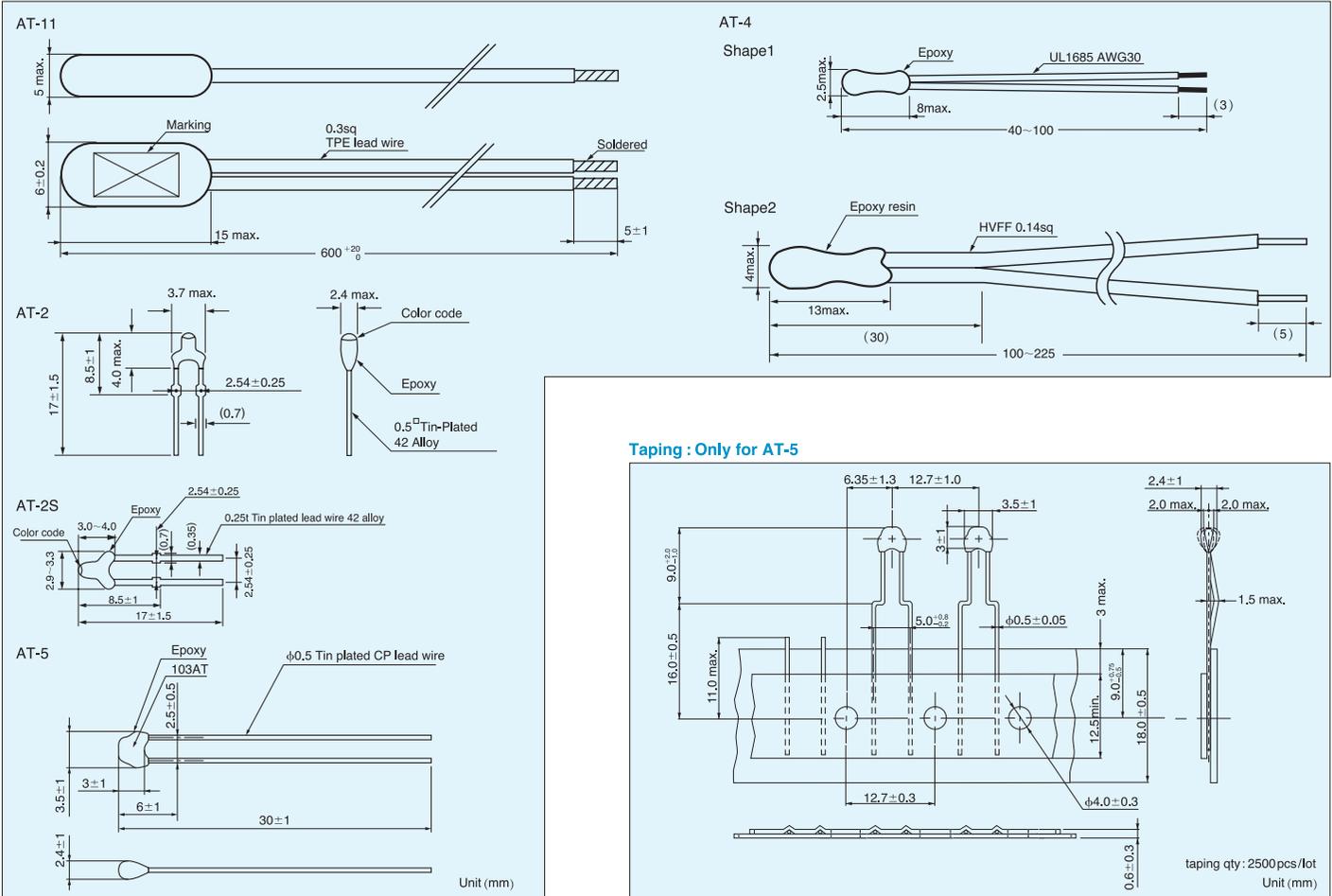
- Shape is unified, facilitating automatic assembly
- Long term reliability

### Applications

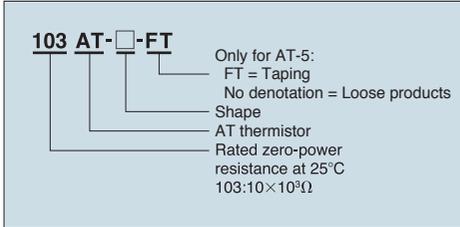
Office automation, measuring instruments, controllers, mobile devices, battery packs, fan motors, home electronics, heating / cooling devices, solar systems, security, thermometers, automotive, vending machines, (cooled) product showcases, agricultural applications



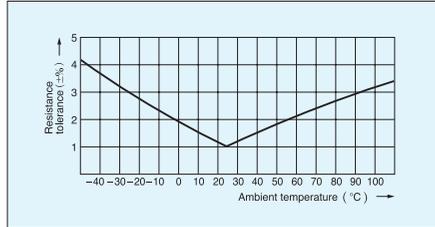
### Dimensions



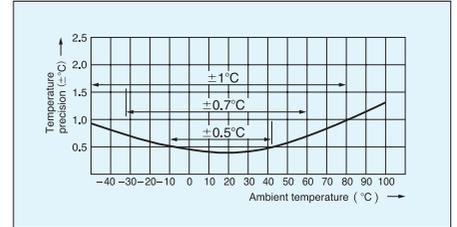
**Part number**



**Resistance tolerance**



**Interchange precision**



**Safety standards**

For AT-2 type: UL1434, CSA-C22.2, No.0 Authorized.

**Specifications**

Part No	R <sub>25</sub> <sup>1</sup>	B value <sup>2</sup>	Dissipation factor (mW/°C) Approx.	Thermal time constant (s) <sup>3</sup> Approx.	Rated maximum power dissipation (at 25°C) (mW)	Category temp. range (°C)	Color code
102AT-2	1.0kΩ±1%	3100K±1%	2	15	10	-50~+90	Black
202AT-2	2.0kΩ±1%	3182K±1%					Red
502AT-2	5.0kΩ±1%	3324K±1%				-50~+110	Yellow
103AT-2	10.0kΩ±1%	3435K±1%					White
203AT-2	20.0kΩ±1%	4013K±1%					None
104AT-2	100.0kΩ±1%	4665K±1%					
102AT-11	1.0kΩ±1%	3100K±1%	3	75	-50~+90	None	
202AT-11	2.0kΩ±1%	3182K±1%					
502AT-11	5.0kΩ±1%	3324K±1%					
103AT-11	10.0kΩ±1%	3435K±1%					
103AT-4 Shape1	10.0kΩ±1%	3435K±1%	2	10	10	-50~+90	None
103AT-4 Shape2	10.0kΩ±1%	3435K±1%	4	35	20		
103AT-2S	10.0kΩ±1%	3435K±1%	1	15	5	-50~+110	White
103AT-5	10.0kΩ±1%	3435K±1%	2.5		12.5		None

(Other resistance values are also available. Please contact us.)

\*1 Rated zero-power resistance value at 25°C.

\*2 B value determined by rated zero-power resistance at 25°C and 85°C.

\*3 Time necessary to reach 63.2% of temperature difference. Measured in still air.

**Resistance - Temperature**

Temperature (°C)	Type							Temperature (°C)	Type						
	102AT	202AT	502AT	103AT	203AT	503AT	104AT		102AT	202AT	502AT	103AT	203AT	503AT	104AT
-50	24.46	55.66	154.6	329.5	1253	3168	11473	35	0.7229	1.424	3.508	6.940	13.06	32.48	60.94
-45	18.68	42.17	116.5	247.7	890.5	2257	7781	40	0.6189	1.211	2.961	5.827	10.65	26.43	48.10
-40	14.43	32.34	88.91	188.5	642.0	1632	5366	45	0.5316	1.033	2.509	4.911	8.716	21.59	38.13
-35	11.23	24.96	68.19	144.1	465.8	1186	3728	50	0.4587	0.8854	2.137	4.160	7.181	17.75	30.44
-30	8.834	19.48	52.87	111.3	342.5	872.8	2629	55	0.3967	0.7620	1.826	3.536	5.941	14.64	24.42
-25	6.998	15.29	41.21	86.43	253.6	646.3	1864	60	0.3446	0.6587	1.567	3.020	4.943	12.15	19.72
-20	5.594	12.11	32.44	67.77	190.0	484.3	1340	65	0.3000	0.5713	1.350	2.588	4.127	10.13	15.99
-15	4.501	9.655	25.66	53.41	143.2	364.6	969.0	70	0.2622	0.4975	1.168	2.228	3.464	8.482	13.05
-10	3.651	7.763	20.48	42.47	109.1	277.5	709.5	75	0.2285	0.4343	1.014	1.924	2.916	7.129	10.68
-5	2.979	6.277	16.43	33.90	83.75	212.3	523.3	80	0.1999	0.3807	0.8835	1.668	2.468	6.022	8.796
0	2.449	5.114	13.29	27.28	64.88	164.0	390.3	85	0.1751	0.3346	0.7722	1.451	2.096	5.105	7.271
5	2.024	4.188	10.80	22.05	50.53	127.5	292.5	90	0.1536	0.2949	0.6771	1.266	1.788	4.345	6.041
10	1.684	3.454	8.840	17.96	39.71	99.99	221.5	95			0.5961	1.108	1.530	3.712	5.037
15	1.408	2.862	7.267	14.69	31.36	78.77	168.6	100			0.5265	0.9731	1.315	3.185	4.220
20	1.184	2.387	6.013	12.09	24.96	62.56	129.5	105			0.4654	0.8572	1.134	2.741	3.546
25	1.000	2.000	5.000	10.00	20.00	50.00	100.0	110			0.4128	0.7576	0.9807	2.369	2.994
30	0.8486	1.684	4.179	8.313	16.12	40.20	77.81								

Unit (kΩ)