

ET Thermistor Series (fast response time type)

ET THERMISTOR

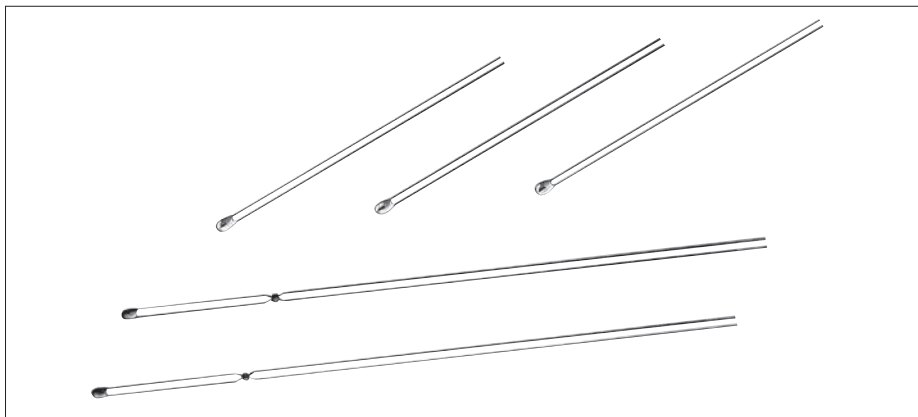
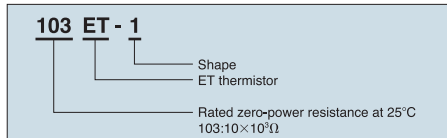
The ET thermistor series is very small and features a very fast response time.

- Small resistance and B-value tolerance; high accuracy
- Shape is unified, facilitating automatic assembly
- Long term reliability

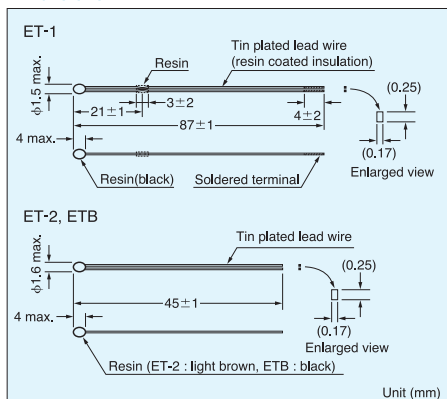
Applications

Body thermometers, thermometers, medical devices, controllers, mobile devices, battery packs, home electronics, toilet heaters, security, LCDs, electric vehicles

Part number



Dimensions



Specifications

Part No.	R ₂₅ *1	B value*2	Dissipation factor (mW/°C) Approx.	Thermal time constant (s)*3	Rated maximum power dissipation (at 25°C) (mW)	Category temp. range (°C)
402ET-1(2)	4.0kΩ±3%	3100K±1%	0.7	3.2 (3.4)	3.5	-40~ +90
103ET-1(2)	10.0kΩ±3%	3250K±1%				-40~ +100
303ET-1(2)	30.0kΩ±3%	3760K±1%				-40~ +100
403ET-1(2)	40.0kΩ±3%	3525K±1%				-40~ +100
413ET-1(2)	41.0kΩ±3%	3435K±1%				-40~ +100
503ET-1(2)	50.0kΩ±3%	4055K±1%				-40~ +100
593ET-1(2)	59.0kΩ±3%	3617K±1%				-40~ +100
833ET-1(2)	83.0kΩ±3%	4013K±1%				-40~ +100
104ET-1(2)	100.0kΩ±3%	4132K±1%				-40~ +100
224ET-1(2)	226.0kΩ±3%	4021K±1%				-40~ +100
234ET-1(2)	232.0kΩ±3%	4274K±1%				-40~ +100
103ETB(-1P)	10.0kΩ±1%, ±2%	3435K±1%				-40~ +90

*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											
	402ET	103ET	303ET	403ET	413ET	503ET	593ET	833ET	104ET	224ET	234ET	103ETB
-40	57.71	170.9	810.7	833.3	772.8	1602	1318	2664	3325	7005	9046	204.7
-30	35.34	102.2	445.1	481.1	456.5	855.0	754.3	1421	1769	3784	4680	118.5
-20	22.38	63.07	253.7	287.5	277.9	474.4	445.8	788.5	977.5	2116	2515	71.02
-10	14.60	40.08	149.8	177.2	174.1	272.7	271.7	453.0	559.0	1225	1401	43.67
0	9.797	26.16	91.30	112.4	111.7	161.9	170.1	269.3	329.8	730.1	808.2	27.70
10	6.737	17.51	57.31	73.00	73.63	99.13	109.4	164.8	200.5	447.8	480.2	18.07
20	4.736	11.99	37.00	48.61	49.57	62.38	72.10	103.6	125.3	282.1	293.7	12.11
25	4.000	10.00	30.00	40.00	41.00	50.00	59.00	83.00	100.0	226.0	232.0	10.00
30	3.394	8.387	24.47	33.08	34.08	40.24	48.55	66.91	80.27	182.1	184.4	8.301
40	2.476	5.988	16.56	22.96	23.89	26.58	33.41	44.18	52.62	120.3	118.6	5.811
50	1.835	4.353	11.45	16.26	17.06	17.93	23.44	29.80	35.23	81.07	78.00	4.147
60	1.378	3.217	8.070	11.70	12.38	12.33	16.73	20.51	24.00	55.75	52.39	3.011
70	1.049	2.414	5.791	8.569	9.135	8.588	12.15	14.37	16.59	39.01	35.87	2.224
80	0.7997	1.836	4.222	6.367	6.838	6.064	8.951	10.24	11.64	27.78	24.99	1.668
90	0.6145	1.416	3.125	4.797	5.190	4.338	6.697	7.419	8.287	20.10	17.72	1.267
100			2.346	3.662	3.990	3.142	5.077	5.459		14.75	12.75	

Unit (kΩ)

Specifications

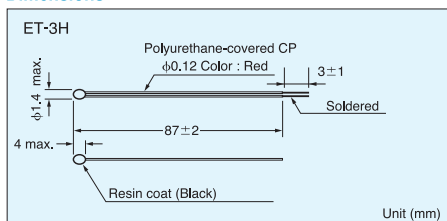
Part No.	R ₃₇ *1	B value*2	Dissipation factor (mW/°C) Approx.	Thermal time constant (s)*3	Rated maximum power dissipation (at 25°C) (mW)	Category temp. range (°C)
503ET-3H87L-20073	29.615kΩ~30.263kΩ	3944K±0.5%	0.7	0.8	3.5	-40~+100

*1 Rated zero-power resistance value at 37°C

*2 B value determined by rated zero-power resistance at 30°C and 45°C

*3 Time necessary to reach 63.2% of temperature difference. Measured in oil.

Dimensions



Tolerance of the group : ± 0.09% /group

Group	Resistance (kΩ)	Group	Resistance (kΩ)
C	29.615/29.641/29.667	I	29.937/29.964/29.991
D	29.668/29.695/29.721	J	29.992/30.018/30.045
E	29.722/29.749/29.775	K	30.046/30.073/30.100
F	29.776/29.802/29.828	L	30.101/30.127/30.154
G	29.829/29.856/29.883	M	30.155/30.182/30.209
H	29.884/29.910/29.936	N	30.210/30.237/30.263

Notes: Min./Center/Max.