

Thermistors — continued

NTC, R-T Curve Matched

BETATHERM



Insulated: Dia = 2.4 max, Leads L = 200
 Non-insulated: Dia = 2.4 max, Leads L = 76



- Small size
- High precision
- Offers advantages in circuit standardisation and replacement without calibration
- Interchangeable
- Exceptional ageing stability
- Available with either insulated or non-insulated leads

'BetaCURVE' matched NTC thermistors have a tight tolerance on their R-T (resistance-temperature) curve over a wide temperature range. Manufacturing and quality assurance techniques maintain tight control of materials and device thermal electrical properties.

Temperature range: -55°C to +150°C
 Tolerance over temp. range 0°C to +70°C: ±0.2°C
 Dissipation constant: 1.0mW/°C
 Time constant (max. in still air): 10s
 Flying Leads (insulated types): 200mm 30AWG silver plated copper with white Kynar UL1423 insulation

Resistance @ 25°C	0 to 50°C Beta	
	Value	0 to 50°C Beta Max. Deviation
1,000Ω	3263	0.38%
2,252Ω, 3,000Ω, 5,000Ω, 10,000Ω	3892	0.32%
30,000Ω, 100,000Ω	4143	0.30%
1,000,000Ω	4582	0.63%

RP300

Resistance @ 25°C	Mfrs. List No.	Order Code	Price Each			
			1+	25+	100+	250+
Non-insulated 76mm Leads						
1KΩ	1K2A1	606-662				
1,252Ω	2.2K3A1	151-588				
3KΩ	3K3A1	151-589				
5KΩ	5K3A1	151-590				
10KΩ	10K3A1	151-591				
30KΩ	30K6A1	151-592				
100KΩ	100K6A1	151-593				
1MΩ	1M9A1	606-674				
Insulated 200mm Leads						
1,252Ω	2.2KA359I	732-217				
3KΩ	3K3A340I	732-229				
5KΩ	5K3A373I	732-230				
10KΩ	10K3A542I	732-242				
30KΩ	30K6A309I	732-254				
100KΩ	100K6A372I	732-266				

PTC



Surface mount PTC thermistors with silver terminations supplied on tape and reel, suitable for wave and reflow soldering. The very small 25V B59701 Series are for limit temperature sensing, and the 80V 120°C B59707 device is suitable for overcurrent protection, time delay and current stabilisation.



B59701: H = 2.0, W = 1.25, D = 0.85, Terminations W = 0.75 max.
B59707: H = 3.2, W = 2.5, D = 1.7, Terminations W = 0.5 ± 0.25

	B59701	B59707
Max. operating voltage	25V (T _A = 0 to 40°C)	80V (T _A = 60°C)
Rated resistance R _N	≤1KΩ	125Ω
Threshold temp. tol. ΔT	±5%	—
Resistance	≤5.5KΩ (T _{NAT} -ΔT)	—
	≥13.3KΩ (T _{NAT} +ΔT)	—
	≥40KΩ (T _{NAT} +15K)	—
Switching current	—	90mA, 300mA max.

Mfrs. List Nos.: B59701A090A62 = 730-166, B59701A110A62 = 730-178, B59701A120A62 = 730-233, B59707A120A62 = 730-245.

RP301

Voltage max.	T _{NAT} Threshold Temp. (nom.)	Order Code	Price Each			
			1+	100+	250+	500+
25V	90°C	730-166				
25V	110°C	730-178				
25V	120°C	730-233				
80V	120°C	730-245				

MiniReel™

PTC, B59701 and B59707 Series – Surface Mount



Tape width = 8mm

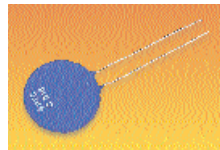
- 100mm reel size
- 250 pieces on each reel
- Ideal for pre-production, prototyping and production shortfalls
- Complete with leader tape
- Surface mount PTC thermistors
- Operating temperature -55°C to +155°C

Voltage (max.)	T _{NAT} Threshold Temp. (nom.)	MiniReel List No.	Order Code
25V	110°C	MR-B59701A110A62	345-2906
25V	120°C	MR-B59701A120A62	345-2918
80V	120°C	MR-B59707A120A62	345-2920

RP327

250 Pieces Per Reel MiniReel List No.	Order Code	Price Per Reel		
		1+	3+	5+
MR-B59701A110A62	345-2906			
MR-B59701A120A62	345-2918			
MR-B59707A120A62	345-2920			

PTC



A range of leaded disc PTC thermistors designed for over current and short-circuit protection applications, UL approved.

Lead L = 35 (min.), Lead spacing = 5.08

Rated Current I _N (mA)	Switching Current I _S (mA)	R ₂₅ ± 25% Ω	d max. (mm)	Mfrs. List No.	Order Code
V ref = 24V, V max. = 30V, T ref. = 120°C					
1300	2600	0.45	17.5	B59945-C120-A70	606-881
850	1700	0.8	13.5	B59955-C120-A70	606-893
600	1200	1.2	11.0	B59965-C120-A70	606-900
450	900	1.8	9.0	B59975-C120-A70	606-911
250	500	4.6	6.5	B59985-C120-A70	606-923
120	240	13	4.0	B59995-C120-A70	606-935
V ref = 63V, V max. = 80V, T ref. = 120°C					
700	1400	1.65	22.0	B59930-C120-A70	606-959
450	900	2.3	17.5	B59940-C120-A70	606-960
320	640	3.7	13.5	B59950-C120-A70	606-972
250	500	5.6	11.0	B59960-C120-A70	606-984
150	300	9.4	9.0	B59970-C120-A70	606-996
85	170	25	6.5	B59980-C120-A70	607-009
50	100	55	4.0	B59990-C120-A70	607-010
V ref. = 110V, V max. = 160V, T ref. = 160°C					
800	1600	2.6	26.0	B59810-C160-A70	607-022
525	1050	3.7	22.0	B59830-C160-A70	607-034
400	800	6	17.5	B59840-C160-A70	607-046
250	500	10	13.5	B59850-C160-A70	607-058
180	360	15	11.0	B59860-C160-A70	607-060
125	250	25	9.0	B59870-C160-A70	607-071
70	140	70	6.5	B59880-C160-A70	607-083
35	70	150	4.0	B59890-C160-A70	607-095
V ref. = 220V, V max. = 265V, T ref. = 120°C					
650	1300	2.6	26.0	B59810-C120-A70	607-101
200	400	10	13.5	B59850-C120-A70	607-113
140	280	15	11.0	B59860-C120-A70	607-125
100	200	25	9.0	B59870-C120-A70	607-137
80	160	35	9.0	B59872-C120-A70	607-149
55	110	65	9.0	B59875-C120-A70	607-150
55	110	70	6.5	B59880-C120-A70	607-162
30	60	150	4.0	B59890-C120-A70	607-174

RP302

Rated Current I _N	Order Code	Price Each			
		1+	100+	250+	500+
V max. = 30V					
1300mA	606-881				
850mA	606-893				
600mA	606-900				
450mA	606-911				
250mA	606-923				
120mA	606-935				
V max. = 80V					
700mA	606-959				
450mA	606-960				
320mA	606-972				
250mA	606-984				
150mA	606-996				
85mA	607-009				
50mA	607-010				

continued