

PTC



A range of leaded disc PTC thermistors designed for over current and short-circuit protection applications, B/F recognised



Max. operating voltage 30V (T_A = 0 to 40°C)
 Rated resistance R_N ≤100Ω (single), ≤300Ω (triple)
 Threshold temperature tol. ΔT ±5%
 Resistance @ T_{NAT} -ΔT ≤550Ω (each device)
 Resistance @ T_{NAT} +ΔT ≥1330Ω (each device)
 Resistance @ T_{NAT} +15K ≥4KΩ (each device)
 Colour coding 100°C = red/red, 130°C = blue/blue, 160°C = blue/red, all connecting wires (triple types) = black

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	B59945C120A70	975-3052
850	1700	0.8	13.5	B59955C120A70	975-3060
600	1200	1.2	11.0	B59965C120A70	975-3079
450	900	1.8	9.0	B59975C120A70	975-3087
250	500	4.6	6.5	B59985C120A70	975-3095
120	240	13	4.0	B59995C120A70	975-3109
V Ref = 63V, V max. = 80V, T ref. = 120°C					
700	1400	1.65	22.0	B59930C120A70	975-3117
450	900	2.3	17.5	B59940C120A70	975-3125
320	640	3.7	13.5	B59950C120A70	975-3133
250	500	5.6	11.0	B59960C120A70	975-3141
150	300	9.4	9.0	B59970C120A70	975-3150
85	170	25	6.5	B59980C120A70	975-3168
50	100	55	4.0	B59990C120A70	975-3176
V Ref = 110V, V max. = 160V, T ref. = 160°C					
800	1600	2.6	26.0	B59810C160A70	975-3184
525	1050	3.7	22.0	B59830C160A70	975-3192
400	800	6	17.5	B59840C160A70	975-3206
250	500	10	13.5	B59850C160A70	975-3214
180	360	15	11.0	B59860C160A70	975-3222
125	250	25	9.0	B59870C160A70	975-3230
70	140	70	6.5	B59880C160A70	975-3249
35	70	150	4.0	B59890C160A70	975-3257
V Ref = 220V, V max. = 265V, T ref. = 120°C					
650	1300	2.6	26.0	B59810C120A70	975-3265
200	400	10	13.5	B59850C120A70	975-3273
140	280	15	11.0	B59860C120A70	975-3281
100	200	25	9.0	B59870C120A70	975-3290
80	160	35	9.0	B59872C120A70	975-3303
55	110	65	9.0	B59875C120A70	975-3311
55	110	70	6.5	B59880C120A70	975-3320
30	60	150	4.0	B59890C120A70	975-3338

Rated Current I _N	Order Code	Price Each				
		1+	50+	100+	250+	+
1300mA	975-3052	131.00	120.00	109.00	97.00	--
850mA	975-3060	70.00	63.00	58.00	52.00	--
600mA	975-3079	88.00	80.00	73.00	65.00	--
450mA	975-3087	76.00	69.00	63.00	56.00	--
250mA	975-3095	66.00	60.00	55.00	49.00	--
120mA	975-3109	52.00	48.00	43.00	39.00	--
700mA	975-3117	188.00	170.00	156.00	139.00	--
450mA	975-3125	138.00	125.00	114.00	102.00	--
320mA	975-3133	112.00	101.00	92.00	83.00	--
250mA	975-3141	88.00	80.00	73.00	65.00	--
150mA	975-3150	76.00	69.00	63.00	56.00	--
85mA	975-3168	66.00	60.00	55.00	49.00	--
50mA	975-3176	52.00	48.00	43.00	39.00	--
800mA	975-3184	296.00	276.00	252.00	225.00	--
525mA	975-3192	206.00	192.00	175.00	156.00	--
400mA	975-3206	154.00	147.00	134.00	120.00	--
250mA	975-3214	116.00	108.00	98.00	88.00	--
180mA	975-3222	97.00	88.00	81.00	72.00	--
125mA	975-3230	92.00	86.00	79.00	70.00	--
70mA	975-3249	77.00	71.00	65.00	58.00	--
35mA	975-3257	55.00	50.00	45.00	40.00	--
650mA	975-3265	270.00	246.00	225.00	200.00	--
200mA	975-3273	117.00	110.00	100.00	90.00	--
140mA	975-3281	100.00	93.00	85.00	76.00	--
100mA	975-3290	92.00	86.00	79.00	70.00	--
80mA	975-3303	92.00	86.00	79.00	70.00	--
55mA	975-3311	75.00	68.00	62.00	55.00	--
55mA	975-3320	78.00	73.00	67.00	60.00	--
30mA	975-3338	67.00	62.00	57.00	51.00	--

PTC, Single and Triple



L = 14, Dia. = 4, Lead L = 500, Connecting lead (triple types) L = 200

- Insulating encapsulation suitable for protection of windings in electric motors and similar applications up to 30V
- Available either singly or triple, ie. three thermistors connected in series
- Trip temperature is coded in litz wire colour
- Wires are silver plated and PTFE insulated



PTC



L = 12, Dia. = 4, Leads L = 500

Resistance, nom 1000Ω @ T_{NF}, 550Ω @ T_{NF} -5°C
 1330Ω @ T_{NF} +5°C, 4000Ω @ T_{NF} +15°C
 Ambient temperature -25°C to T_{NF} +15°C
 Typ. dissipation constant 20mW/°C (embedded), 5.5mW/°C (free air @ 25°C)

Switch Temperature T _{NF}	Lead Colours	Mfrs. List No.	Order Code
90°C	Green-green	YGA090TB	731-420
100°C	Red-red	YGA100TB	731-432
120°C	Grey-grey	YGA120TB	731-444
160°C	Blue-red	YGA160TB	731-468

All Order Codes	Price Each				
	1+	25+	100+	250+	+
	149.00	143.00	132.00	106.00	--

Trip current @ 25°C	Order Code	Price Each				
		1+	10+	100+	300+	+
Low Voltage						
238166051311 195mA	118-7068	66.00	58.00	51.00	43.00	--
238166052711 405mA	118-7069	82.00	76.00	62.00	46.00	--
238166153211 480mA	118-7070	96.00	88.00	72.00	54.00	--
238166154111 615mA	118-7071	96.00	88.00	72.00	54.00	--
238166154711 705mA	118-7072	96.00	88.00	72.00	54.00	--
238166257011 1050mA	118-7073	119.00	108.00	88.00	67.00	--
238166259211 1380mA	118-7074	119.00	108.00	88.00	67.00	--
238166351121 1755mA	118-7075	275.00	251.00	203.00	154.00	--
Mains Voltage						
238166051193 17mA	118-7076	58.00	51.00	45.00	38.00	--
238166051993 29mA	118-7078	82.00	76.00	62.00	46.00	--
238166052893 42mA	118-7079	82.00	76.00	62.00	46.00	--
238166053993 59mA	118-7080	82.00	76.00	62.00	46.00	--
238166057693 115mA	118-7081	58.00	51.00	45.00	38.00	--
238166151113 165mA	118-7082	96.00	88.00	72.00	54.00	--
238166151713 255mA	118-7083	96.00	88.00	72.00	54.00	--
238166253213 480mA	118-7084	111.00	97.00	85.00	72.00	--
238166457013 1050mA	118-7085	372.00	355.00	292.00	218.00	--

Switch temperature T_S = 140°C (all types)
 Rated temperature range -40°C to +85°C
 Low voltage range 0 to 70°C
 Mains voltage range 0 to 70°C

I _{int} @ 25°C (mA)	I _t @ 25°C (mA)	R ₂₅ ± 25% (Ω)	I _{max} (A)	d _{max} (mm)	Mfrs. List No.	Order Code
Low Voltage, Vmax = 30V dc (except 478-090 = 60V)						
130	195	25	1.2	4.6	238166051311	118-7068
270	405	6	2.5	4.6	238166052711	118-7069
320	480	5	3.5	6.5	238166153211	118-7070
410	615	3	4.5	6.5	238166154111	118-7071
470	705	2.5	5	8.5	238166154711	118-7072
700	1050	1.3	8	10.5	238166257011	118-7073
920	1380	0.9	11	12.5	238166259211	118-7074
1170	1755	0.7	13.5	16.5	238166351121	118-7075
Mains Voltage, Vmax = 265V rms						
11	17	3000	0.08	5	238166051193	118-7076
19	29	1200	0.14	5	238166051993	118-7078
28	42	500	0.2	5	238166052893	118-7079
39	59	260	0.3	5	238166053993	118-7080
76	115	85	0.55	5	238166057693	118-7081
110	165	48	0.65	7	238166151113	118-7082
170	255	22	0.9	8.5	238166151713	118-7083
320	480	8.4	2.2	12.5	238166253213	118-7084
700	1050	2.8	5.5	20.5	238166457013	118-7085

PTC



- Detect excessive temperatures inside industrial equipment
- Especially suitable for within windings of electromagnetic equipment

Resistors, Potentiometers & Thermistors

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Compliant Non-compliant Limited stock - RoHS replacement available
RoHS