Applications

- Overcurrent and short-circuit protection

Features

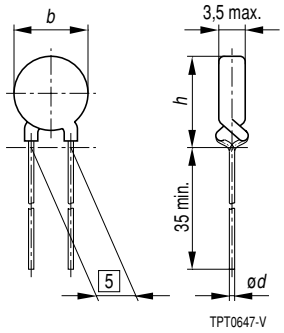
- Lead-free terminals
- Manufacturer's logo and type designation stamped on in yellow
- Low resistance
- For rated currents of up to 2,1 A
- High thermal stability
- UL approval to UL 1434 (file number E69802)
- VDE approval (license number 104843 E)

Options

- Leadless disks and leaded disks without coating available on request
- Thermistors with diameter $b \leq 11{,}0$ mm are also available on tape (to IEC 60286-2)

Delivery mode

- Cardboard strips (standard)
- Cardboard tape reeled or in AMMO pack on request



Dimensions (mm)

Type	b_{max}	∅d	h_{max}
C 935	22,0	0,6	25,5
C 945	17,5	0,6	21,0
C 955	13,5	0,6	17,0
C 965	11,0	0,6	14,5
C 975	9,0	0,6	12,5
C 985	6,5	0,6	10,0
C 995	4,0	0,5	7,5

General technical data

Max. operating voltage (T_A = 60 °C)	V_{max}	20	VDC or VAC
Rated voltage	V_N	12	VDC or VAC
Switching cycles (typ.)	N	100	
Reference temperature (typ.)	T_{Ref}	160	°C
Resistance tolerance	ΔR_N	± 25 %	
Operating temperature range (V = 0)	T_{op}	– 40/+ 125	°C
(V = V_{max})	T_{op}	0/+ 60	°C

Electrical specifications and ordering codes

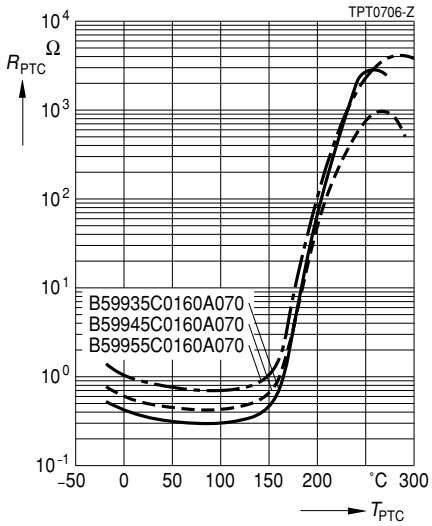
Type	I_N	I_S	I_{Smax} (V=V_{max})	I_r (typ.) (V=V_{max})	I_r (typ.) (V=V_N)	R_N	R_{min}	Ordering code
	mA	mA	A	mA	mA	Ω	Ω	
C 935	2100	4150	10,0	240	380	0,3	0,2	B59935C0160A070
C 945	1500	3050	8,0	170	270	0,45	0,3	B59945C0160A070
C 955	950	1900	5,5	120	190	0,8	0,5	B59955C0160A070
C 965	700	1450	4,3	105	165	1,2	0,7	B59965C0160A070
C 975	550	1100	3,0	85	135	1,8	1,1	B59975C0160A070
C 985	300	600	1,0	65	100	4,6	2,7	B59985C0160A070
C 995	150	300	0,7	40	65	13	7,8	B59995C0160A070

Reliability data

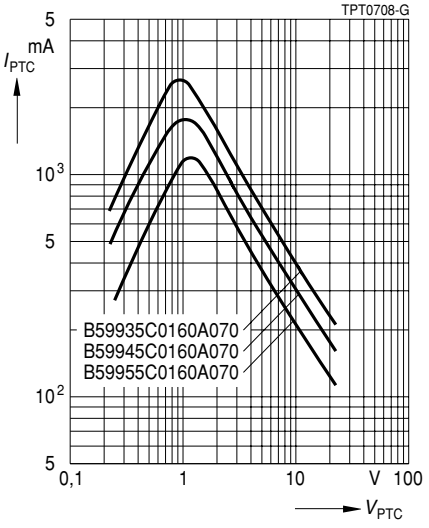
Test	Standard	Test conditions	$\lvert\Delta R_{25}/R_{25}\rvert$
Switching test at room temperature	IEC 60738-1	I_{Smax} V_{max} Number of cycles: 100	< 25%
Dry heat at upper category temperature	IEC 60738-1	Storage at upper category temperature for *t*: 1000 h	< 25%
Life test at V_{max}/T_{op}	IEC 60738-1	Storage at V_{max}/T_{op} for *t*: 1000 h	< 25%
Storage in damp heat	IEC 60068-2-3	Temperature of air: 40 °C Relative humidity of air: 93% Duration: 56 days	< 10%
Rapid change of temperature in air	IEC 60068-2-14, Test N_a	$T = T_{LCT}$, $T = T_{UCT}$ Number of cycles: 5 *t*: 30 min	< 10%
Vibration	IEC 60068-2-6, Test F_C	*f* = 10–55 Hz h = 0,75 mm (respectively 10 g) *t*: 3 · 2 h	< 5%
Bump	IEC 60068-2-27	Pulse shape: half-sine *a*: = 50 g Pulse duration: 1 ms; 6 · 3 pulses	< 5%
Climatic sequence	IEC 60068-2-30	Dry heat: $T = T_{UCT}$ *t*: 16 h Damp heat first cycle Cold: $T = T_{LCT}$ *t*: 2 h Damp heat 5 cycles	< 10%

Characteristics (typical)

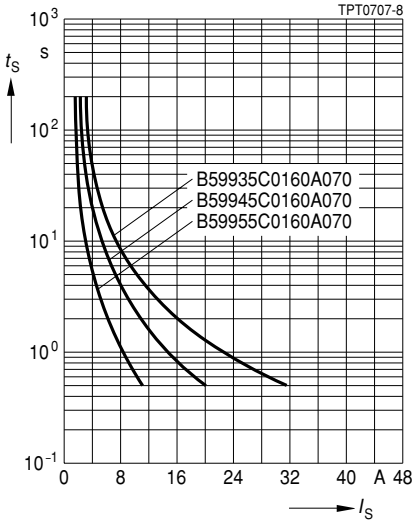
PTC resistance R_{PTC} versus PTC temperature T_{PTC} (measured at low signal voltage)



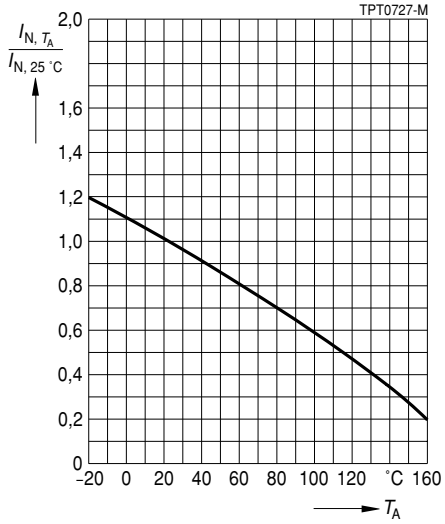
PTC current I_{PTC} versus PTC voltage V_{PTC} (measured at 25 °C in still air)



Switching time t_S versus switching current I_S (measured at 25 °C in still air)

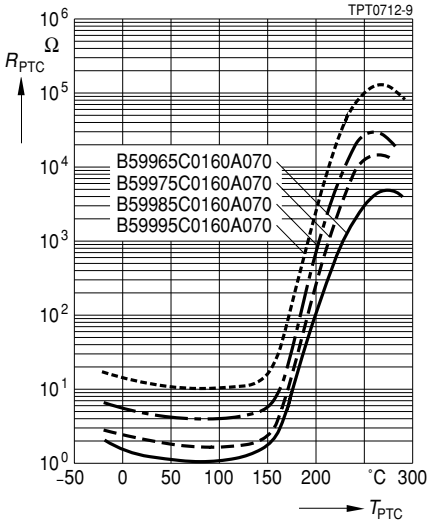


Rated current I_N versus ambient temperature T_A (measured in still air)

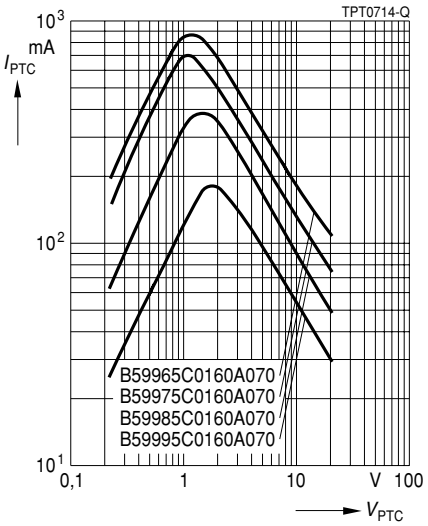


Characteristics (typical)

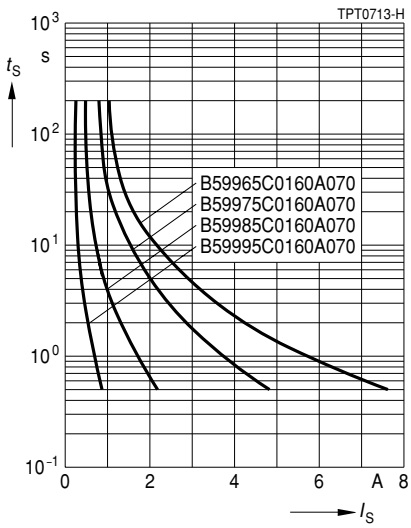
PTC resistance R_{PTC} versus PTC temperature T_{PTC} (measured at low signal voltage)



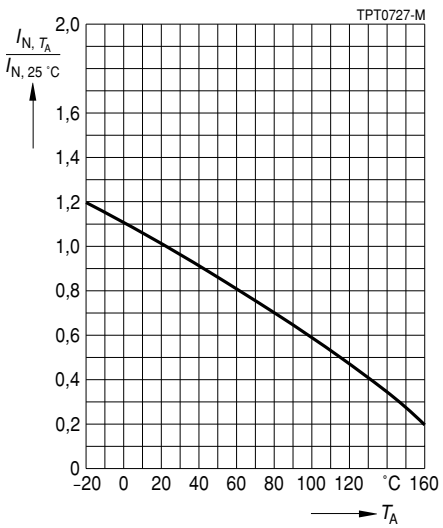
PTC current I_{PTC} versus PTC voltage V_{PTC} (measured at 25 °C in still air)



Switching time t_S versus switching current I_S (measured at 25 °C in still air)



Rated current I_N versus ambient temperature T_A (measured in still air)



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