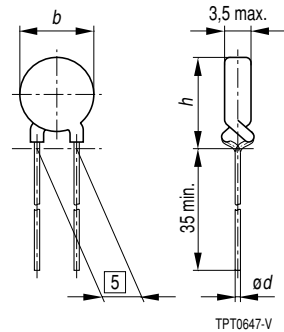


Applications

- 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} | $\varnothing d$ | 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 ($T_A = 60^\circ\text{C}$) | 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 | $^\circ\text{C}$ |
| Resistance tolerance | ΔR_N | $\pm 25\%$ | |
| Operating temperature range ($V = 0$) | T_{op} | $-40/+125$ | $^\circ\text{C}$ |
| | T_{op} | $0/+60$ | $^\circ\text{C}$ |

Electrical specifications and ordering codes

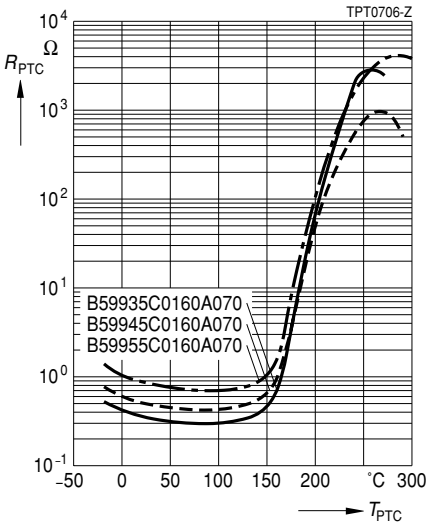
| Type | I_N | I_S | $I_{S\max}$ ($V = V_{\max}$) | I_r (typ.) ($V = V_{\max}$) | I_r (typ.) ($V = V_N$) | R_N | R_{\min} | Ordering code |
|-------|-------|-------|-----------------------------------|------------------------------------|-------------------------------|----------|------------|-----------------|
| | 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

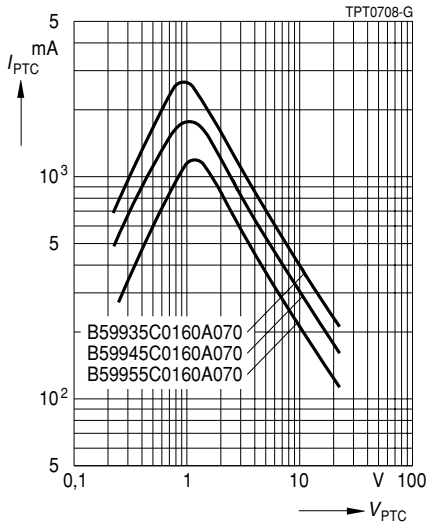
| Test | Standard | Test conditions | $ \Delta R_{25}/R_{25} $ |
|--|-------------------------------|--|--------------------------|
| Switching test at room temperature | IEC 60738-1 | I_{Smax} V_{max} Number of cycles: 100 | < 25 % |
| Dry heat at upper category temperature | IEC 60738-1 | Storage at 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)

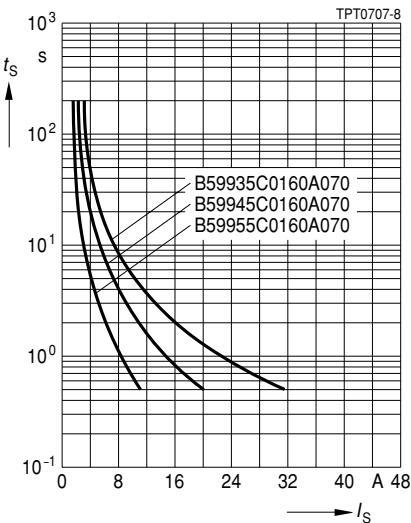
PTC resistance R_{PTC} versus
 PTC temperature T_{PTC}
 (measured at low signal voltage)



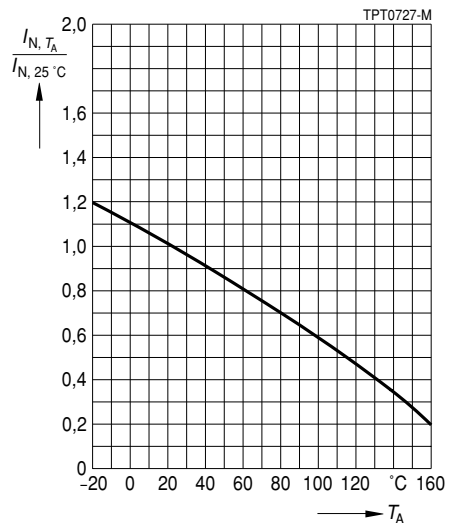
PTC current I_{PTC} versus PTC voltage V_{PTC}
 (measured at 25 °C in still air)



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

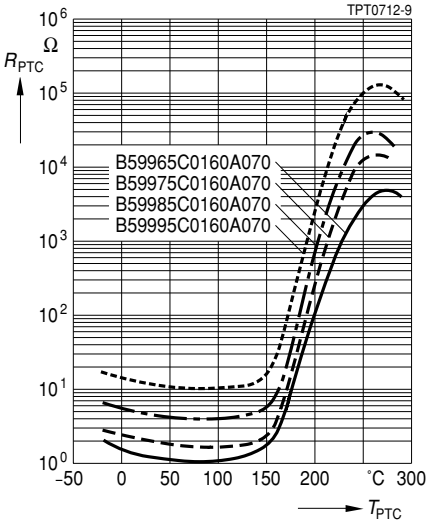


Rated current I_N versus ambient temperature T_A
 (measured in still air)

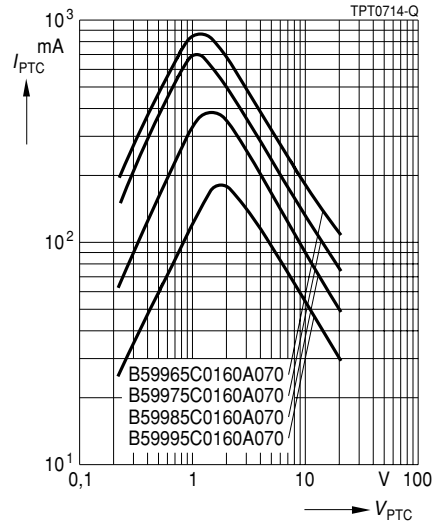


Characteristics (typical)

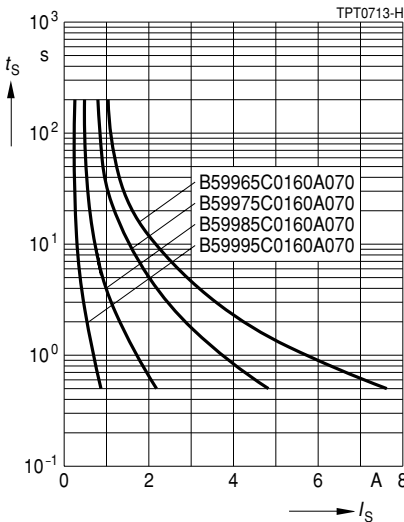
PTC resistance R_{PTC} versus
PTC temperature T_{PTC}
(measured at low signal voltage)



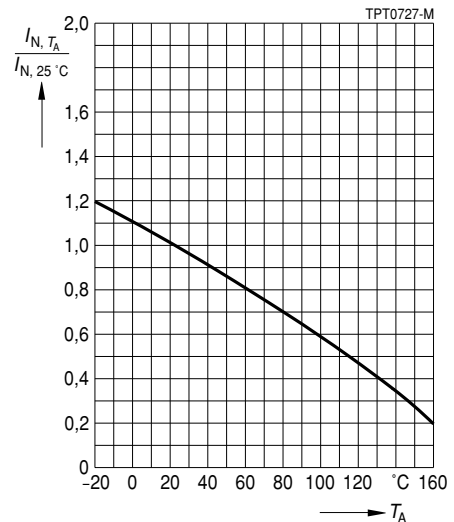
PTC current I_{PTC} versus PTC voltage V_{PTC}
(measured at 25 °C in still air)



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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