



PTC Thermistors for Telecom

Line Card Applications, SMDs

Series/Type: B590**

Release:

Date:

© EPCOS AG 2003. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.
Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

Applications

- Overcurrent protection for line cards

Features

- Compliant with ITU-T K20, K21, K45
 - basic level lightning surges (10/700 μ s)
 - basic level power induction (600 V, 1 A, 0.2 s)
 - power contact criteria A/B (230 V, 15 min.)
- Suitable for continuous connection to mains voltages of 110/230 VAC in tripped (high ohmic) condition
- For surface mounting onto PCB
- Marked with manufacturer's logo and type designation
- Narrow resistance tolerance
- UL approval to UL 1434 with $V_{\max} = 245$ V and $V_R = 220$ V (file number E69802)

Options

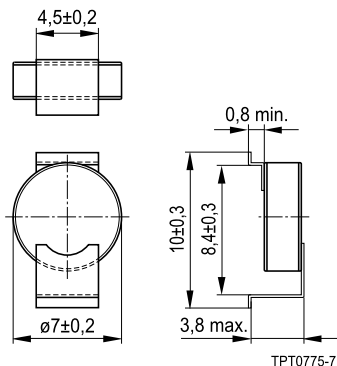
- Alternative tolerances and resistances on request

Delivery mode

- Blister tape, 330-mm reel

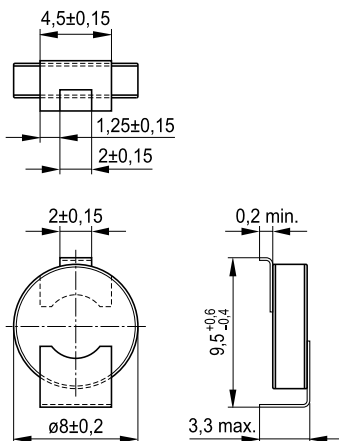
Dimensional drawings

Version: Gamma L



TPT0775-7

Version: Gamma I

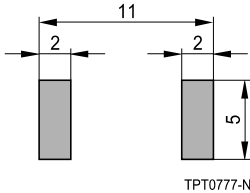


TPT0656-U

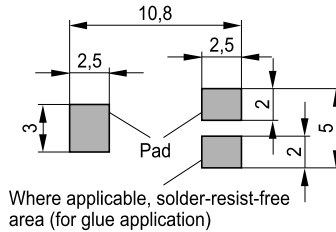
Dimensions in mm

Recommended solder pads

Version: Gamma L



Version: Gamma I



Dimensions in mm

General technical data

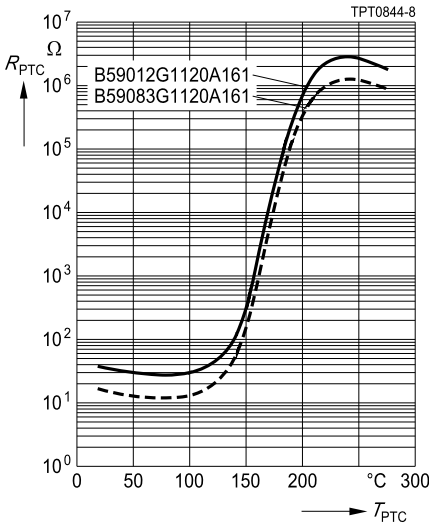
Rated voltage	V_R	60	VDC
Max. switching voltage	V_{Smax}	265	VAC
Tolerance of R_R	ΔR_R	± 20	%
Resistance matching per reel	$R_{25,match}$	± 0.5	Ω
Operating temperature range	T_{op}	$-25/+125$	$^{\circ}C$
	T_{op}	$0/+60$	$^{\circ}C$

Electrical specifications and ordering codes

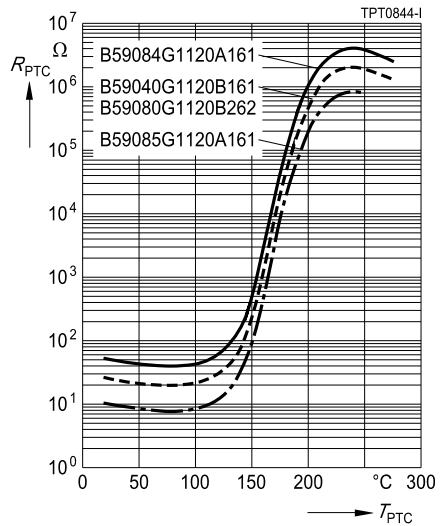
Type	R_R	R_{min}	I_R @ 25 $^{\circ}C$	I_R @ 70 $^{\circ}C$	I_S @ 25 $^{\circ}C$	I_{Smax} @ 230 VAC	t_S @ I_{Smax} , 230 VAC	Ordering code
	Ω	Ω	mA	mA	mA	A	s	
Gamma I								
G1085	10	6.5	180	130	360	1.0	< 5.0	B59085G1120A161
G1083	16	10	150	105	300	1.5	< 2.0	B59083G1120A161
G1080	25	15	130	85	270	2.8	< 0.3	B59080G1120B262
G1084	50	30	90	50	190	2.5	< 0.2	B59084G1120A161
Gamma L								
G1040	25	16	110	70	250	4.0	< 0.2	B59040G1120B161
G1012	35	23	100	70	250	4.6	< 0.2	B59012G1120A161

Characteristics (typical)

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



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



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

