



Self-protecting power resistors

PTC thermistors in plastic case

Series/Type: **B5920***

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PTC thermistors in plastic case

J201, J202, J204

Applications

- Inrush current limiter (charging resistor) for smoothing and DC link capacitors
- To replace high-power fixed resistors for capacitor charging

Features

- Self-protecting in case of malfunction of short-circuit relay or internal short-circuit of capacitor
- Encased thermistor disk with clamp contacts
- For high pulse currents and a high number of operating cycles
- Flame-retardant plastic case
- Case material UL-listed
- Sn-plated lead-free solder pins
- Manufacturer's logo and type designation stamped on in white
- RoHS-compatible

Delivery mode

- Packed in carton box

General technical data

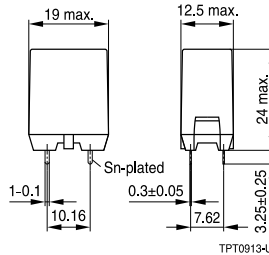
Operating cycles at V_{max}	(charging of capacitor)	N_c	> 100000	cycles
Switching cycles at V_{max}	(failure mode)	N_f	> 10	cycles
Thermal cooling time constant	(typical)	τ_{th}	150	s
Heat capacity	(typical)	C_{th}	2.0	J/K
Operating temperature range	($V = 0$)	T_{op}	-40/+125	°C
Operating temperature range	($V = V_{max}$)	T_{op}	0/+85	°C

Electrical specifications and ordering codes

$V_{max}^{1)}$	R_R	ΔR_R	T_{ref}	$I_{pulse,max}$	V_{BD}	Ordering code
VDC	Ω	%	°C	A_p	V	
550	20	30	135	50	> 700	B59201J0140B010
650	56	30	135	25	> 700	B59202J0135B010
800	100	25	130	20	> 900	B59204J0130B010

1) V_{max} : Maximum permissible DC voltage directly applied to the PTC thermistor.

Dimensional drawing



Dimensions in mm

Wiring diagram

