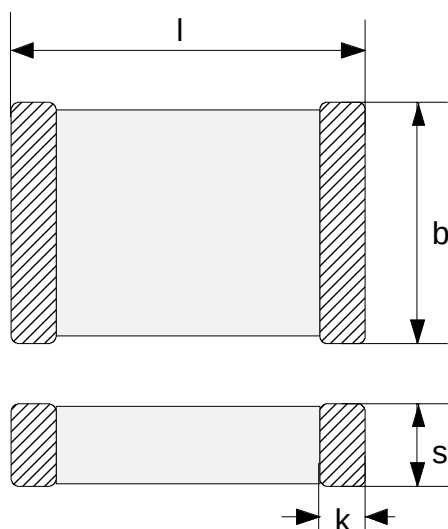


Designation system:

CT = Chip with Three-layer-termination (Ag/Ni/Sn)
 0603 = Dimensions of the device **06x03** (Length x width in 1/100 inch)
 K = Tolerance of the varistor voltage ($\pm 10\%$)
 25 = Max. RMS operating voltage
 G = Taped version, cardboard tape, 7" reel (4000 pcs /reel)

Figure:

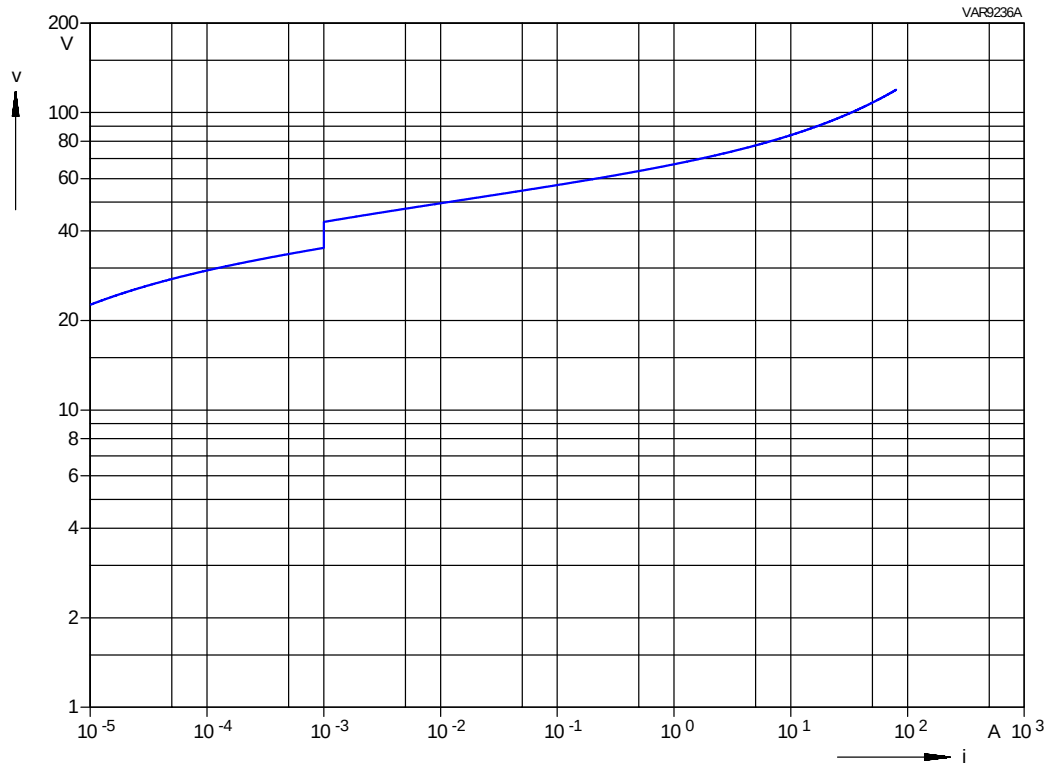


$l = 1,6 \pm 0,15$
 $b = 0,8 \pm 0,1$
 $s = 0,9 \text{ max}$
 $k = 0,1 - 0,4$

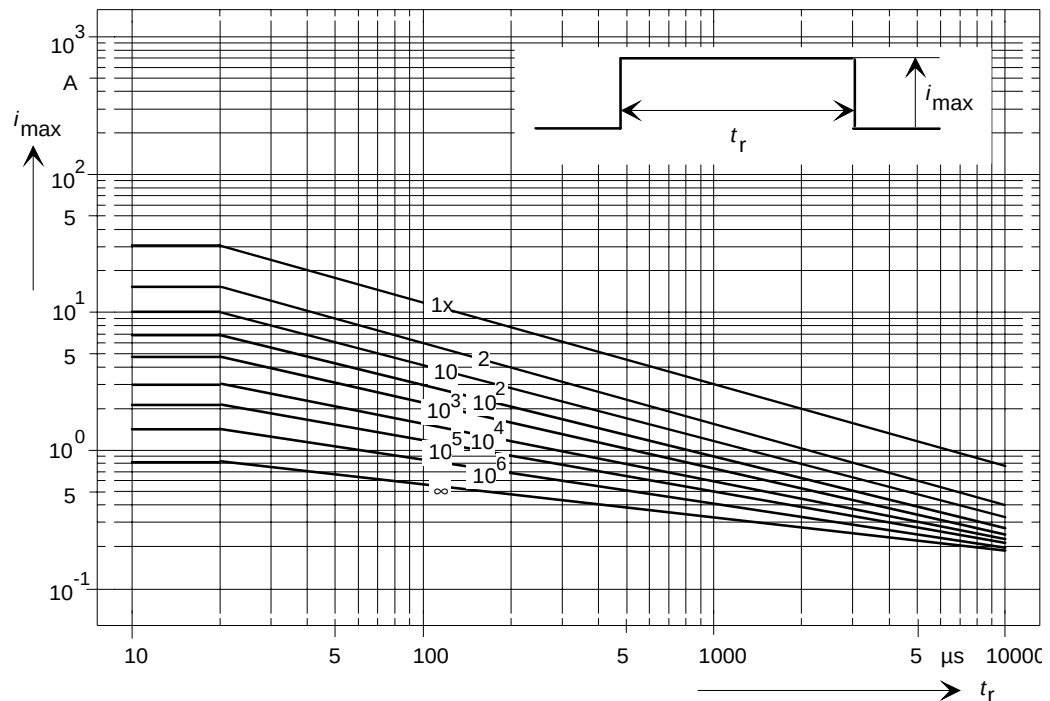
(All dimensions in mm)

ISSUE DATE	09.08.02	ISSUE	e	PUBLISHER	KB VS PE	PAGE	1/6
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V-I-Characteristic



Derating Field



Data Sheet

Electrical Data

Max. operating voltage

RMS voltage

DC voltage

 $V_{\text{eff}} = 25 \text{ V}$
 $V_{\text{DC}} = 31 \text{ V}$

Varistor voltage (@ 1 mA)

 $V_V = 35.1 - 42.9 \text{ V}$

Max. clamping voltage (@ 1 A)

 $V_C = 67 \text{ V}$

Max. average power dissipation

 $P_{\text{max}} = 3 \text{ mW}$

Max. surge current (8/20 μs)

 $\hat{I}_{\text{max}} = 1 \times 30 \text{ A}$

Max. energy absorption (2 ms)

 $E_{\text{max}} = 1 \times 0.3 \text{ J}$

Capacitance (@ 1 MHz, 1 V, 25°C), typical

 $C_{\text{typ.}} = 90 \text{ pF}$

Response time

 $< 0.5 \text{ ns}$

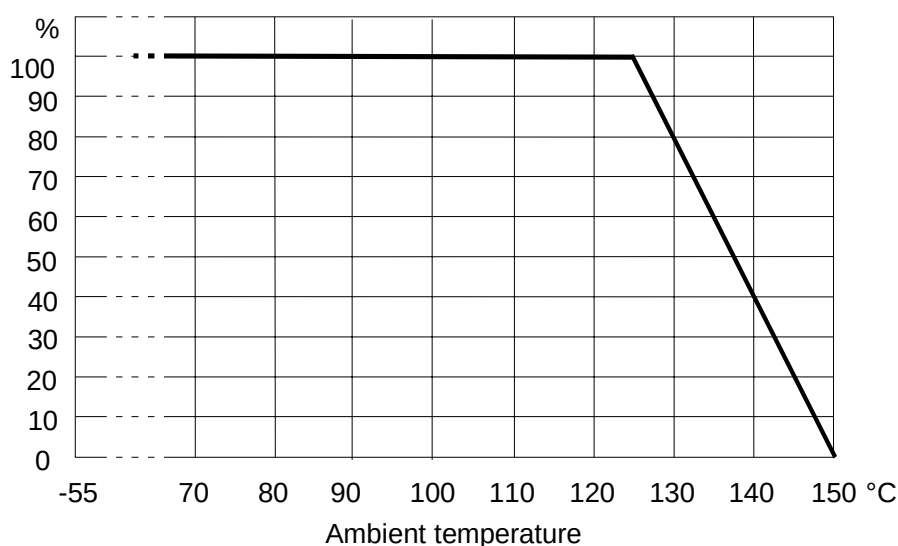
Operating temperature range

 $-40 \dots +125 \text{ }^\circ\text{C}$

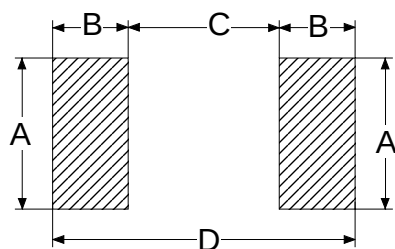
Storage temperature (mounted parts)

 $-40 \dots +150 \text{ }^\circ\text{C}$

Max. current, energy, operating voltage and average power dissipation depending on ambient temperature



Recommended solder pad layout



A = 1,0 mm

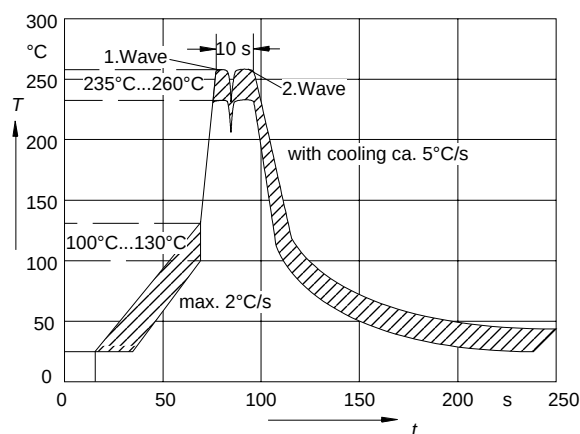
B = 1,0 mm

C = 1,0 mm

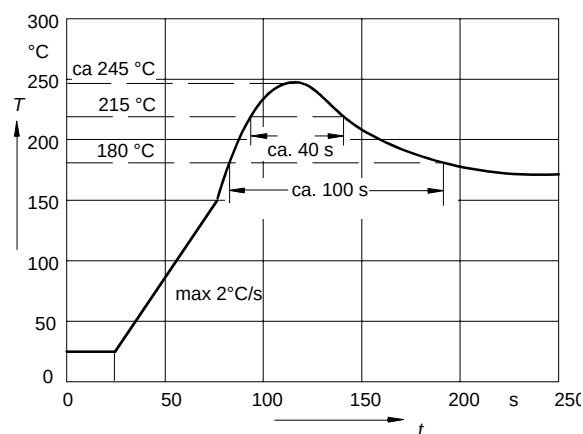
D = 3,0 mm

Recommended soldering temperature profiles

Wave soldering



IR reflow soldering



The components should be soldered within 12 months after delivery from EPCOS. The parts are to be left in the original packing in order to avoid any soldering problems caused by oxidized terminals.

Storage temperature: -25 to 45°C

Relative humidity: <75% annual average, <95% on max. 30 days in a year.

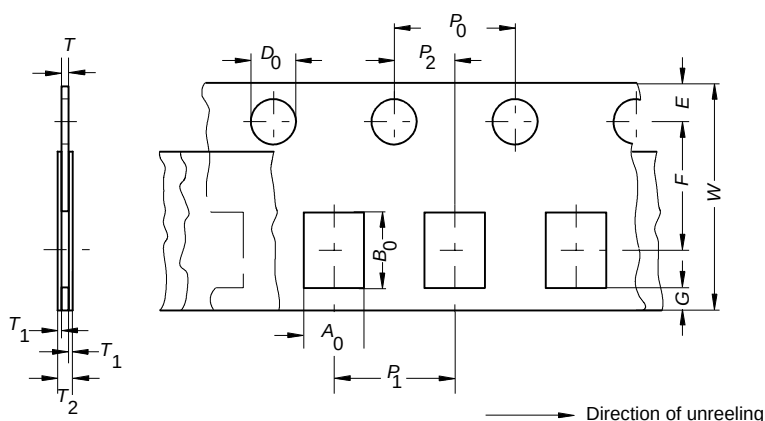
The usage of mild, non activated fluxes for soldering is recommended, as well as a proper cleaning of the PCB.

ISSUE DATE	09.08.02	ISSUE	e	PUBLISHER	KB VS PE	PAGE	4/6
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Taping and Packaging:

Taping: Tape and reel packing according to IEC 60286-3

Tape material: Cardboard



Dimensions and tolerances:

Definition	Symbol	Dimension [mm]	Tolerance [mm]
Compartment width	A_0	0.95	± 0.2
Compartment length	B_0	1.8	± 0.2
Sprocket hole diameter	D_0	1.5	$+0.1 / -0$
Sprocket hole pitch	P_0	4.0	± 0.1 ¹⁾
Distance center hole to center compartment	P_2	2.0	± 0.05
Pitch of the component compartments	P_1	4.0	± 0.1
Tape width	W	8.0	± 0.3
Distance edge to center of hole	E	1.75	± 0.1
Distance center hole to center compartment	F	3.5	± 0.05
Distance compartment to edge	G	0.75	min.
Overall thickness	T_2	1.1	max.
Thickness tape	T	0.9	max.

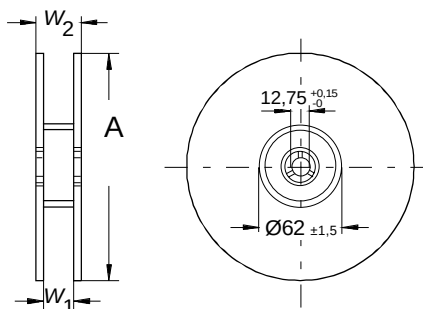
¹⁾ $\leq \pm 0.2$ mm over any 10 pitches

Package: 8 mm tape:

ISSUE DATE	09.08.02	ISSUE	e	PUBLISHER	KB VS PE	PAGE	5/6
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Packing:

Packing material: Plastic



Reel Dimensions:

Definition	Symbol	Dimension [mm]	Tolerance [mm]
Reel diameter	A	180	-2
Reel width (inside)	W_1	8.4	+1.5 /-0
Reel width (outside)	W_2	14.4	max.

Packing unit: 4000 pcs / reel

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ISSUE DATE	09.08.02	ISSUE	e	PUBLISHER	KB VS PE	PAGE	6/6
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