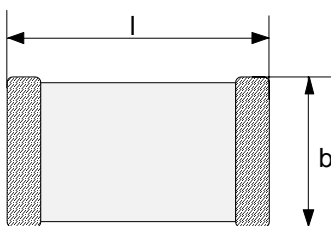


## Designation System

- CT = **C**hip with **T**hree-layer-termination  
 0402 = Dimensions of the device **04x02** (Length x width in 1/100 inch)  
 S...A = **S**pecial tolerance **A** of the varistor voltage  
 11 = Max. operating voltage (RMS voltage)  
 G = Taped version, cardboard tape, 7" reel (10000 pcs/reel)

## Figure

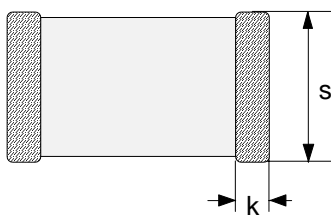


$$l = 1,0 \pm 0,15$$

$$b = 0,5 \pm 0,10$$

$$s = 0,5 \pm 0,10$$

$$k = 0,2 \pm 0,10$$



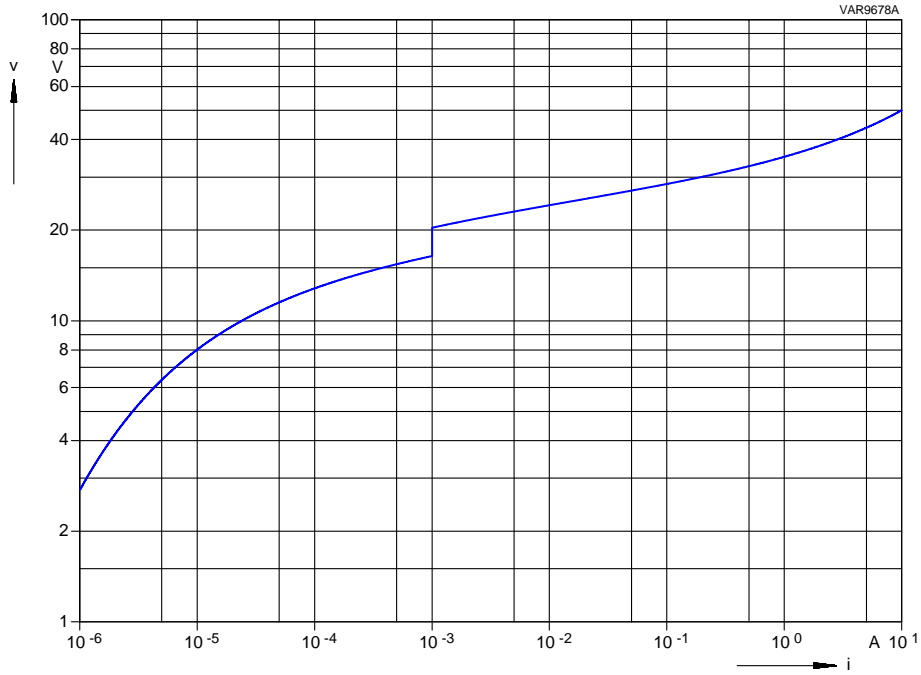
$$\text{Coplanarity} < 0,1$$

(All dimensions in mm)

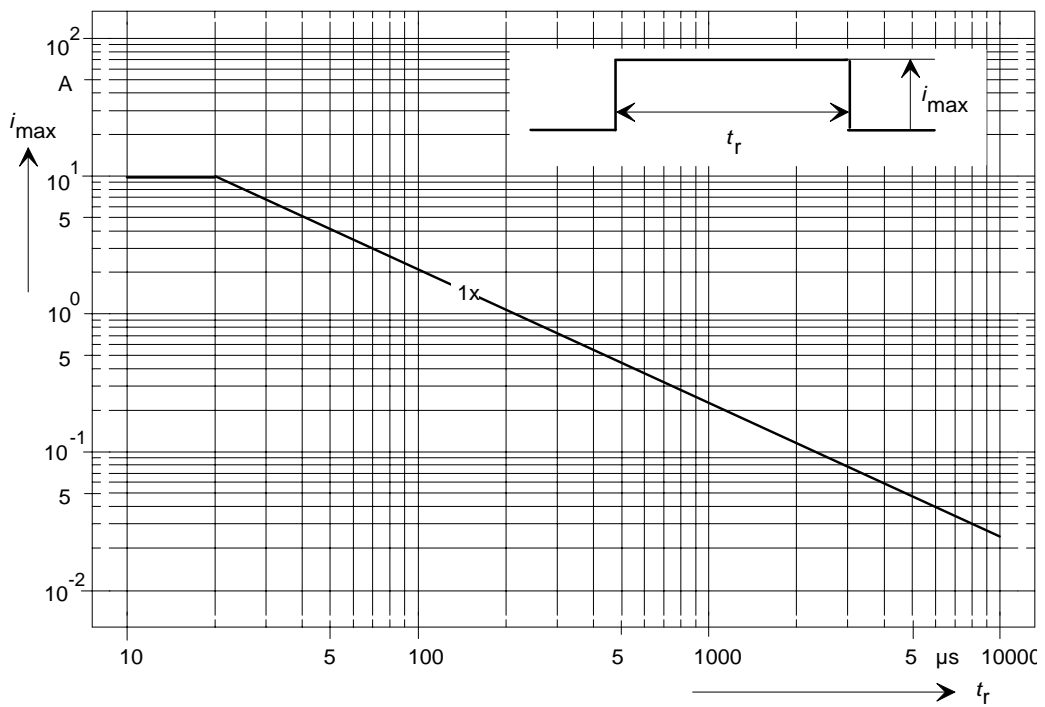
As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies. The information describes the type of component and shall not be considered as assured characteristics. Terms of delivery and rights to change design reserved.

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### V-I-Characteristic



### Derating Field

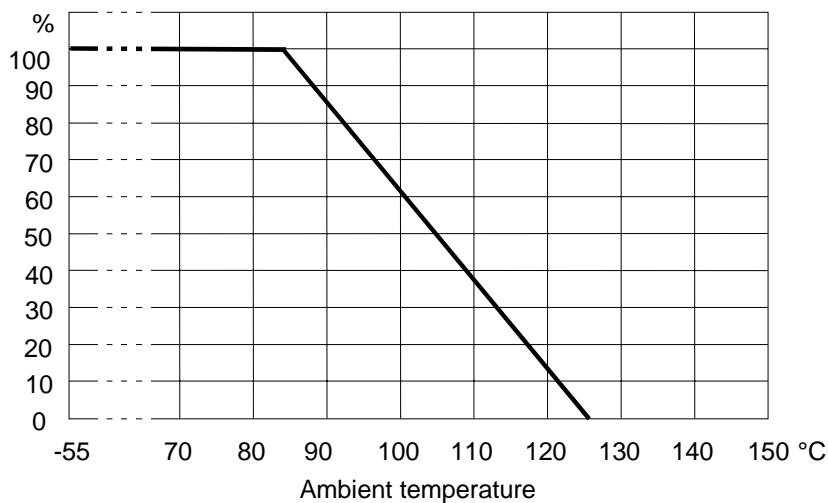




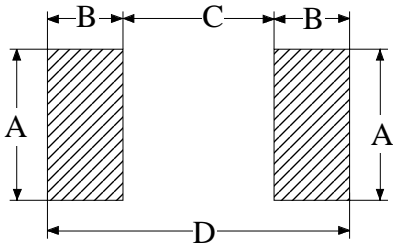
**Electrical Data**

Max. operating voltage	
RMS voltage	<b>V<sub>eff</sub> = 11 V</b>
DC voltage	<b>V<sub>DC</sub> = 14 V</b>
Varistor voltage (@ 1 mA)	<b>V<sub>v</sub> = 16.5 – 20.3 V</b>
Max. clamping voltage (@ 1 A)	<b>V<sub>C</sub> = 35 V</b>
Max. average power dissipation	<b>P<sub>max</sub> = 3 mW</b>
Max. surge current (8/20 μs)	<b>I<sub>max</sub> = 1 x 10 A</b>
Max. energy absorption (2 ms)	<b>E<sub>max</sub> = 1 x 7.5 mJ</b>
Capacitance (@ 1kHz, 1 V; 25°C; typical)	<b>C = 120 pF</b>
Response time	<b>&lt; 0.5 ns</b>
Operating temperature	<b>-55 ... +85 °C</b>
Storage temperature (mounted parts)	<b>-55 ... +125 °C</b>
Termination material	<b>Ag/Ni/Sn</b>
(thickness not specified, adjusted to fulfill wettability specification acc. to IEC 60068-2-58)	
Part weight	<b>0.002 g</b>

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

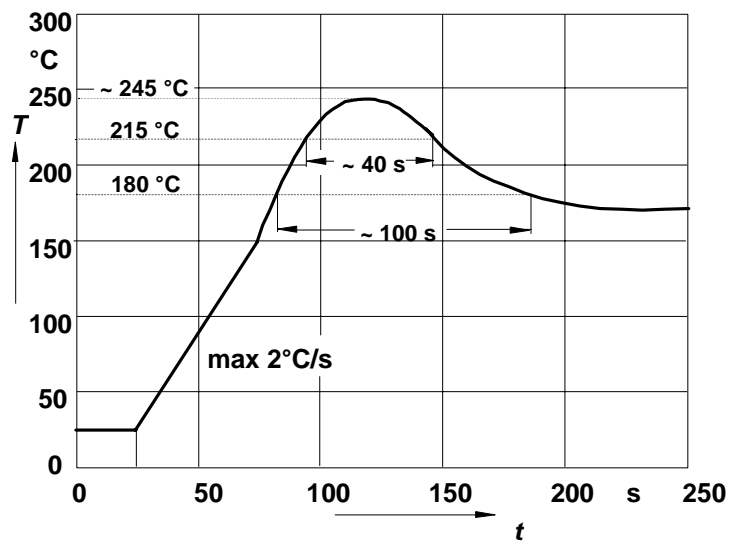


### Recommended Geometry of Solder Pads



A = 0,6 mm  
 B = 0,6 mm  
 C = 0,5 mm  
 D = 1,7 mm

### Recommended Reflow Soldering Temperature Profiles



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.

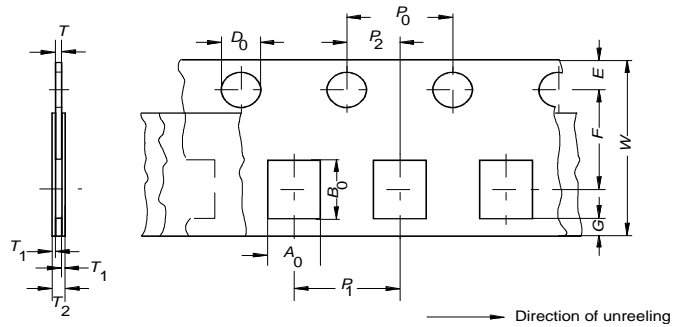
The usage of mild, non activated fluxes for soldering is recommended, as well as proper cleaning of the PCB.

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**Taping according to IEC 60286-3**

Dimensions and tolerances

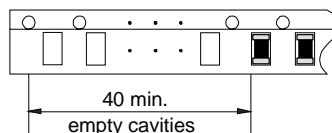
Tape material: cardboard



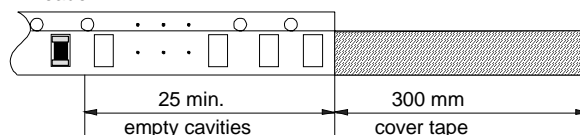
Definition	Symbol	Dim.	Tolerance
Compartment width	A <sub>0</sub>	0.6	± 0.2
Compartment length	B <sub>0</sub>	1.15	± 0.2
Sprocket hole diameter	D <sub>0</sub>	1.5	± 0.1
Sprocket hole pitch	P <sub>0</sub>	4.0	± 0.1 <sup>1)</sup>
Distance center hole to center compartment	P <sub>2</sub>	2.0	± 0.05
Pitch of the component compartments	P <sub>1</sub>	2.0	± 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
Thickness of cardboard tape	T	0.6	max.
Overall thickness	T <sub>2</sub>	0.7	max.

<sup>1)</sup> ≤ ± 0.2 mm over any 10 pitches

Tape end (trailer)



Leader



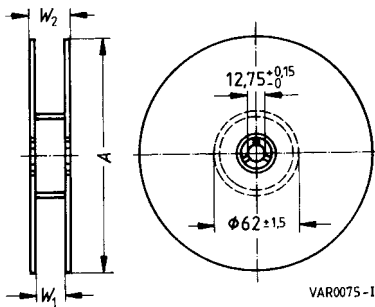
**Data Sheet**

## Package

Each reel in airtight plastic bag with desiccant bag.  
 Dimensions approx. 220 x 200 mm. Weight approx. 170 g

Package: 8 mm tape

Reel material: plastic



Definition	Symbol	Dim.	Tol.
Reel diameter	A	180	-2
Reel width (inside)	$W_1$	8.4	+1.5 /-0
Reel width (outside)	$W_2$	14.4	max.

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