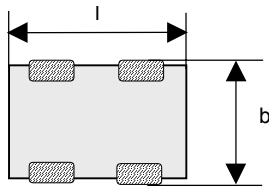


## Designation system

- CA = **C**hip **a**rray  
 04 = Dimensions of the device **04** x 05 (length x width in 1/100 inch)  
 P = Design (**p**arallel internal structure)  
 2 = Number of elements  
 S = **S**pecial tolerance of the varistor voltage  
 17 = Maximum operating voltage  
 T = **T**hree layer terminations  
 LC = **L**ow **c**apacitance  
 G = Taped version (cardboard tape, 7" reel, 4000 pieces/reel)

## Figure



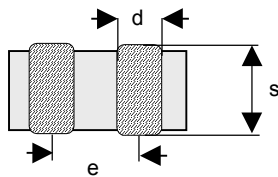
$$l = 1.37 \pm 0.15$$

$$b = 1.0 +0/ -0.15$$

$$s = 0.7 \text{ max.}$$

$$d = 0.36 \pm 0.1$$

$$e_{\text{REF}} = 0.64$$



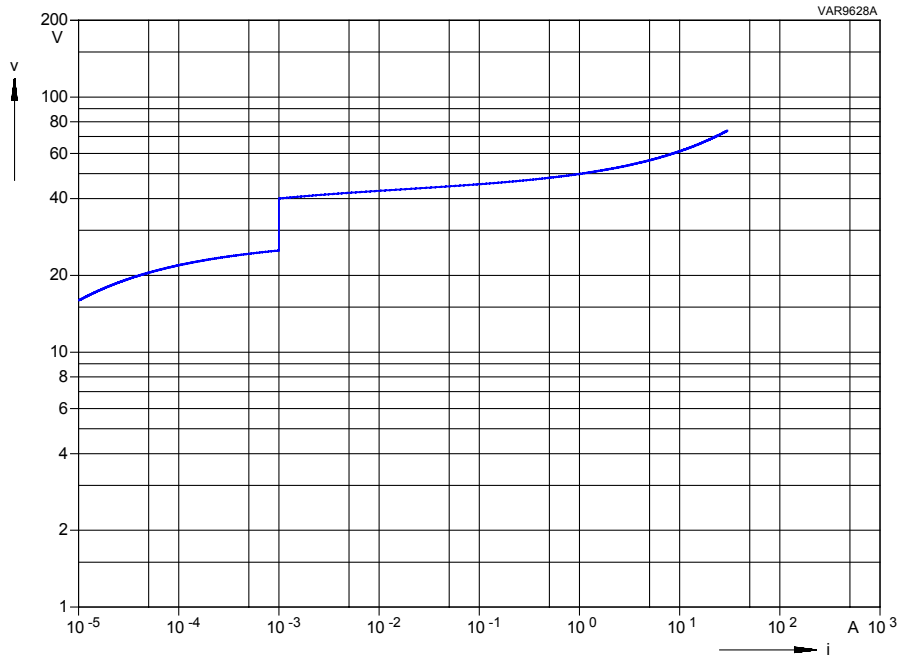
$$\text{Coplanarity} < 0.1$$

(all dimensions in mm)

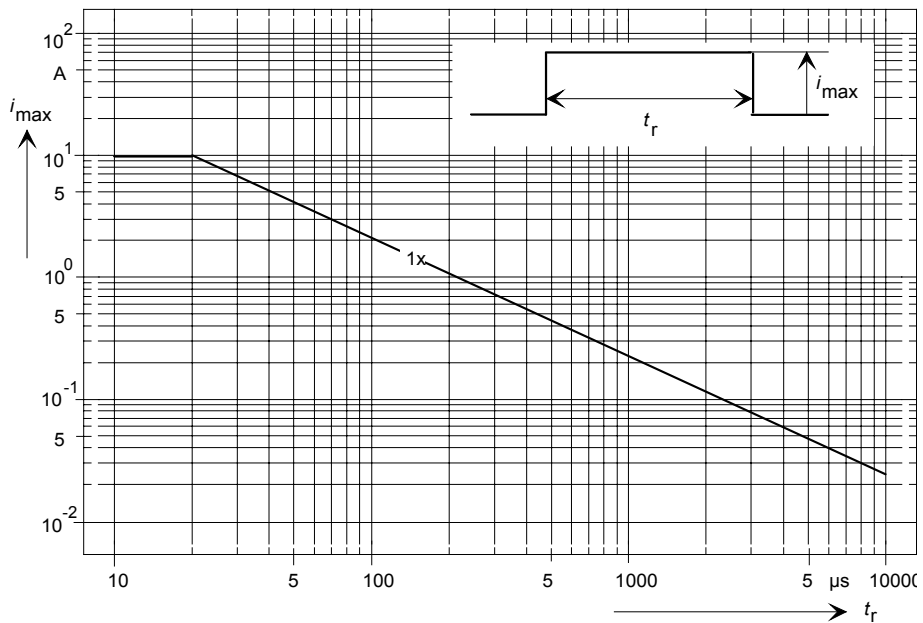
As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies. The information describes the type of component and shall not be considered as assured characteristics.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

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### V-I-characteristic



### Derating field



## Electrical data

Maximum operating voltage

RMS voltage

$V_{RMS} = 17 \text{ V}$

DC voltage

$V_{DC} = 22 \text{ V}$

Varistor voltage (@ 1 mA)

$V_V = 25 \text{ up to } 40 \text{ V}$

Maximum clamping voltage (@ 1 A)

$V_C = 50 \text{ V}$

Maximum average power dissipation

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

Maximum surge current (8/20  $\mu\text{s}$ )

$I_{max} = 1 \times 10 \text{ A}$

Maximum energy absorption (2 ms)

$E_{max} = 1 \times 0.01 \text{ J}$

Capacitance (@ 1 MHz, 0.5 V)

$< 75 \text{ pF}$

Response time

$< 0.5 \text{ ns}$

Operating temperature

$-30 \dots +85 \text{ }^\circ\text{C}$

Storage temperature (mounted parts)

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

Termination material

**Ag/Ni/Sn**

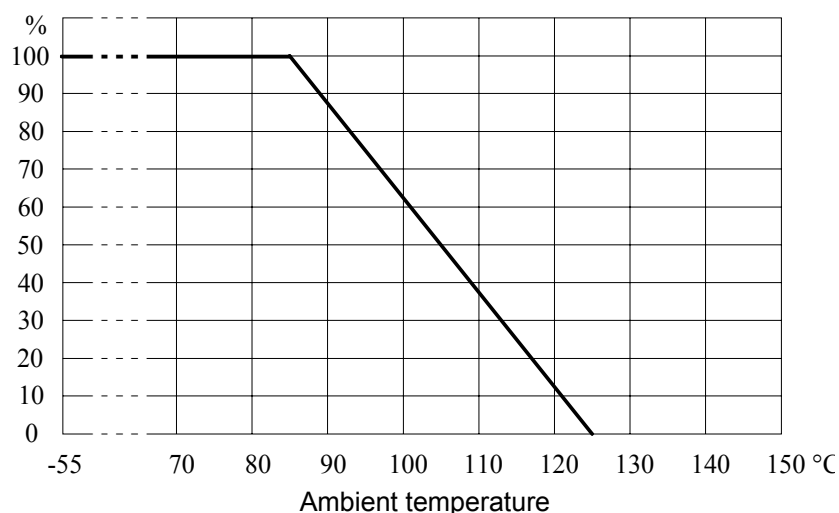
(thickness not specified, adjusted to fulfill wettability specification according to

**DIN IEC 68-2-58**)

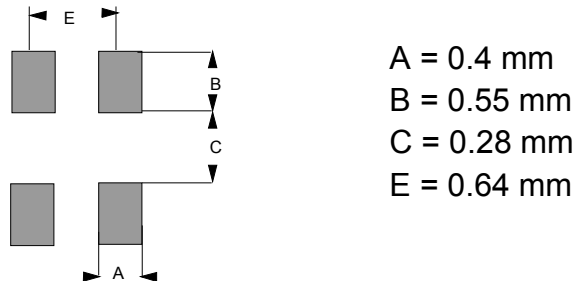
Part weight

**0.004 g**

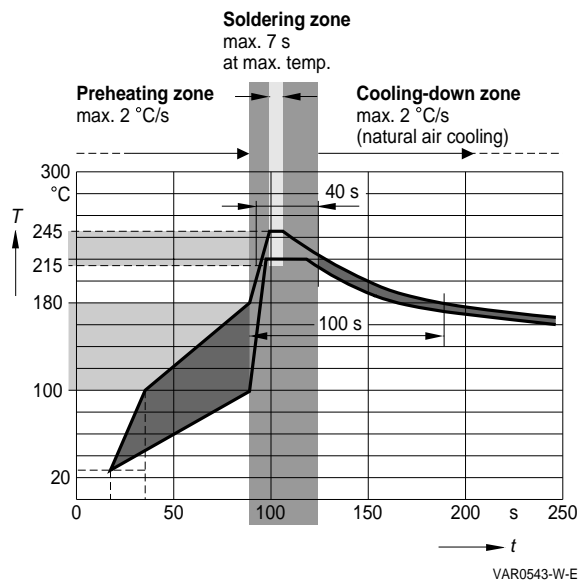
Max. current, energy and average power dissipation depending on ambient temperature



### Recommended geometry of solder pad



### Recommended soldering temperature profile



This component is suited for reflow soldering. Maximum reflow cycles: 2 x

As far as possible, the components shall be employed within 6 months. They should be left in their original packings to avoid soldering problems due to oxidized terminals.

Storage temperature: -25 to 45 °C

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

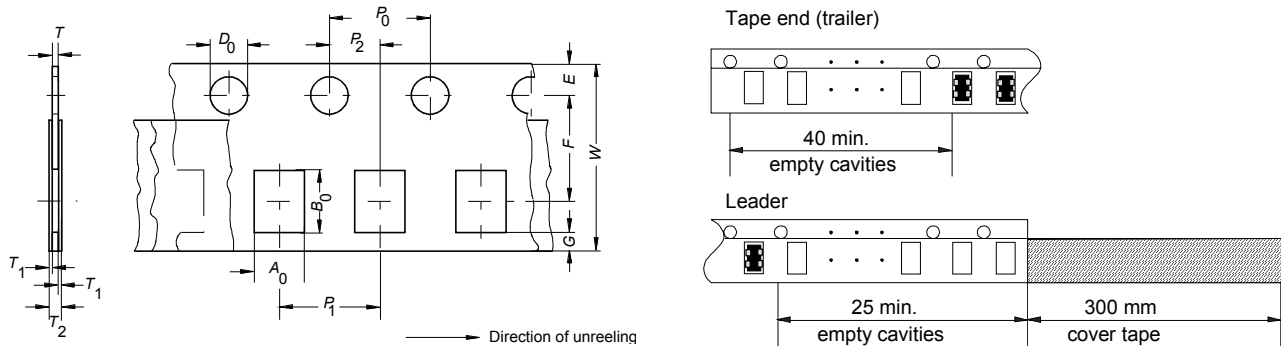
The usage of mild non-activated fluxes for soldering is recommended, as well as proper cleaning of the PCB.

The components are suited for Pb-free soldering.

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## Taping according to IEC 60286-3

**Tape material:** cardboard



### Dimensions and tolerances:

Definition	Symbol	Dimension [mm]	Tolerance [mm]
Compartment width	$A_0$	1.05	$\pm 0.05$
Compartment length	$B_0$	1.57	$\pm 0.05$
Sprocket hole diameter	$D_0$	1.5	$+0.1/-0$
Sprocket hole pitch	$P_0$	4.0	$\pm 0.1$ <sup>1)</sup>
Distance center hole to center compartment	$P_2$	2.0	$\pm 0.05$
Pitch of the component compartments	$P_1$	4.0	$\pm 0.1$
Tape width	$W$	8.0	$\pm 0.3$
Distance edge to center of hole	$E$	1.75	$\pm 0.1$
Distance center hole to center compartment	$F$	3.5	$\pm 0.05$
Distance compartment to edge	$G$	0.75	min.
Thickness of cardboard tape	$T$	0.75	$\pm 0.2$
Overall thickness	$T_2$	0.9	max.

<sup>1)</sup>  $\leq \pm 0.2$  mm over any 10 pitches

## Packing

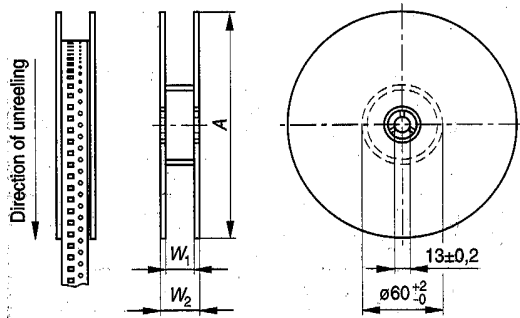
Each reel in airtight plastic bag with desiccant bag.

Dimensions approx. 220 x 200 mm. Weight approx. 170 g.

**Package:** 8 mm tape

**Reel material:** plastic

**Reel dimensions:**



Definition	Symbol	Dimension [mm]	Tolerance [mm]
Reel diameter	A	180	+0/ -3
Reel width (inside)	$W_1$	8.4	+1.5 / -0
Reel width (outside)	$W_2$	14.4	max.

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