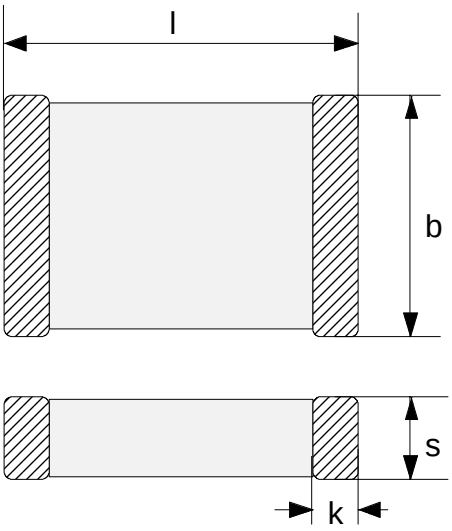
## Designation system:

CT = **C**hip with **T**hree-layer-termination (Ag/Ni/Sn)
0603 = Dimensions of the device **06**x**03** (Length x width in 1/100 inch)
K = Tolerance of the varistor voltage (± 10 %)
25 = Max. RMS operating voltage
G = Taped version, cardboard tape, 7" reel (4000 pcs /reel)

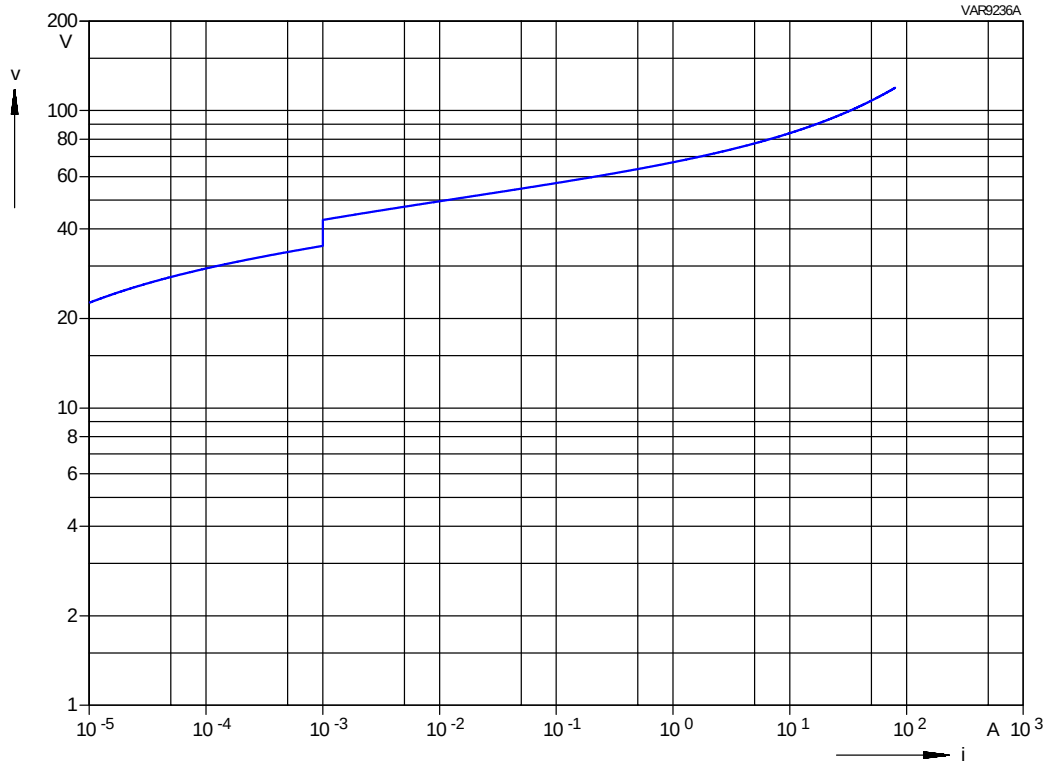
## Figure:



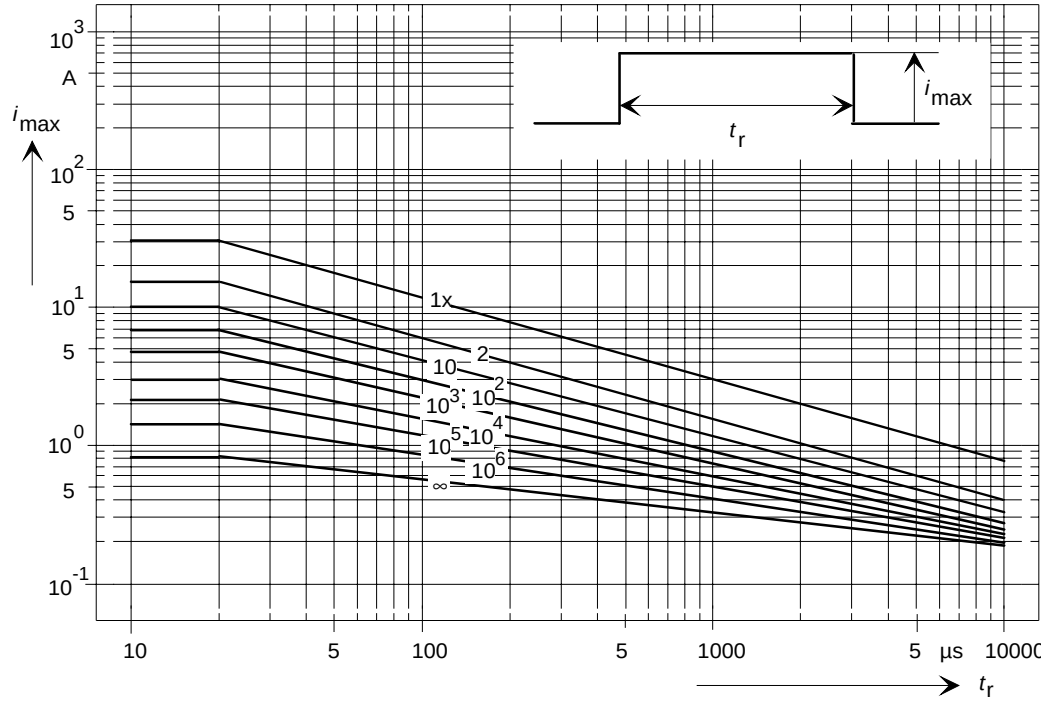

l = 1,6 ± 0,15
b = 0,8 ± 0,1
s = 0,9 max
k = 0,1 - 0,4

(All dimensions in mm)

## V-I-Characteristic



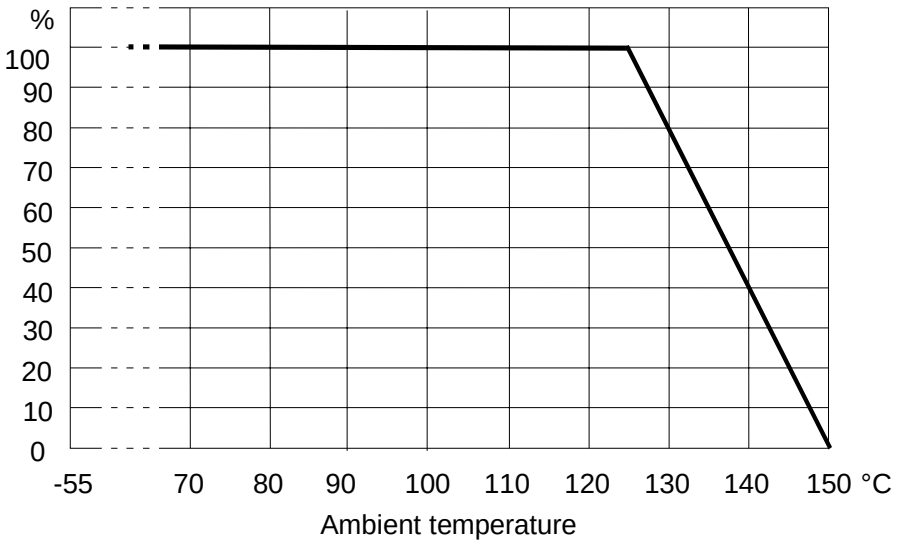

## Derating Field



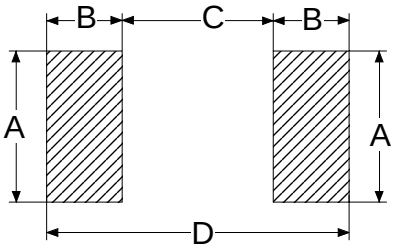
## Electrical Data

| | |
|---|---|
| Max. operating voltage | |
| RMS voltage | **$V_{eff}$ = 25 V** |
| DC voltage | **$V_{DC}$ = 31 V** |
| Varistor voltage (@ 1 mA) | **$V_V$ = 35.1 – 42.9 V** |
| Max. clamping voltage (@ 1 A) | **$V_C$ = 67 V** |
| Max. average power dissipation | **$P_{max}$ = 3 mW** |
| Max. surge current (8/20 µs) | **$\hat{I}_{max}$ = 1 x 30 A** |
| Max. energy absorption (2 ms) | **$E_{max}$ = 1 x 0.3 J** |
| Capacitance (@ 1 MHz, 1 V, 25°C), typical | **$C_{typ.}$ = 90 pF** |
| Response time | **< 0.5 ns** |
| Operating temperature range | **-40 ... +125 °C** |
| Storage temperature (mounted parts) | **-40 ... +150 °C** |

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



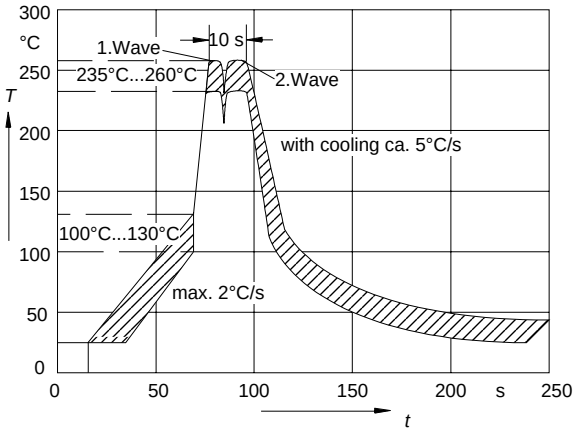
## Recommended solder pad layout



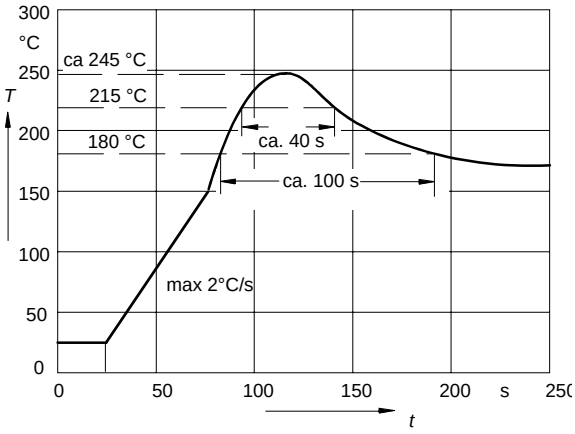

A = 1,0 mm
B = 1,0 mm
C = 1,0 mm
D = 3,0 mm

## Recommended soldering temperature profiles

Wave soldering




IR reflow soldering



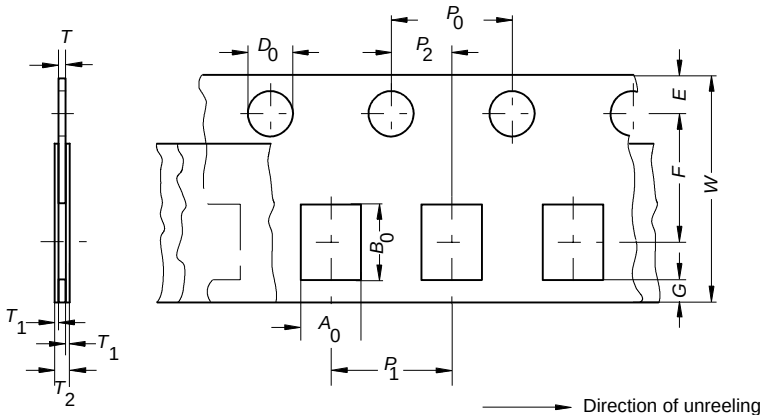

The components should be soldered within 12 months after delivery from EPCOS. The parts are to be left in the original packing in order to avoid any soldering problems caused by oxidized terminals.
Storage temperature: -25 to 45°C
Relative humidity: <75% annual average, <95% on max. 30 days in a year.

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

# Taping and Packaging:

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

**Tape material:** Cardboard




**Dimensions and tolerances:**

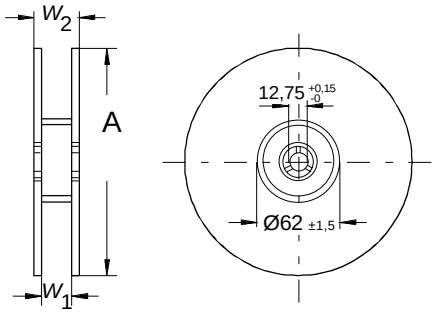
| Definition | Symbol | Dimension [mm] | Tolerance [mm] |
|---|---|---|---|
| Compartment width | $A_0$ | 0.95 | ± 0.2 |
| Compartment length | $B_0$ | 1.8 | ± 0.2 |
| Sprocket hole diameter | $D_0$ | 1.5 | +0.1 /-0 |
| Sprocket hole pitch | $P_0$ | 4.0 | ± 0.1 1) |
| Distance center hole to center compartment | $P_2$ | 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) ≤ ± 0.2 mm over any 10 pitches

Package: 8 mm tape:

## 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