## Precision Resistor Type PMA

Spec Sheet R501-1/2 01/99

## Technical data

| resistance range | $2 \mathrm{mOhm}-500 \mathrm{mOhm}$ |
| :--- | :--- |
| tolerances | $1 \%, 5 \%$ |
| temperature coefficient tcr ( $\mathrm{R}>20 \mathrm{mOhm}$ ) | $< \pm 30 \mathrm{ppm} / \mathrm{K}\left(20^{\circ} \mathrm{C}\right.$ to $\left.60^{\circ} \mathrm{C}\right)$ |
| applicable temperature range | $-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ |
| load capacity | 3 W |
| thermal resistance to ambiente | Rth $<10 \mathrm{~K} / \mathrm{W}$ |
| dielectric withstanding voltage | 100 VAC |
| inductance | $<10 \mathrm{nH}$ |
| stability | deviation $<0.5 \%$ after $2,000 \mathrm{~h}$ |

Remarks: - Standard resistance values according to E12 with the additional values of 2 and 5 - Minimum quantity of other values on request

This resistor has been developed especially for current sense applications in SMD-power modules.

The PMA has been designed for flip-chip mounting on the pc-board. All standard soldering processes like reflow-, infrared-, vapor phase-, dip- and wave-soldering can be used.

The heat which is generated by the measuring current is conducted very efficiently to the pc-board via the heat conductive substrate and the solder joints.

## Form "A"



Form " ${ }^{\text {" }}$



Temperature dependence of the electrical resistance of ISA-PLAN resistors

power derating curve

proposal for pc-board layout - form A

dimensions (mm )

## Tape \& Reel information



16 mm belt according to DIN IEC 286-3
parts/reel: 2500 pcs

| ordering example: PMA-C - R010-5 |  |  |  |
| :---: | :---: | :---: | :---: |
| type | version | resistance value | tolerance |
| PMA | C | mOhm <br> 5 |  |

( Technical modifications reserved)

