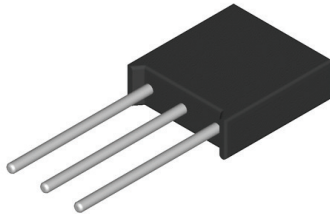


# Resistors

## Precision Voltage Divider

## SMX / SHX - series



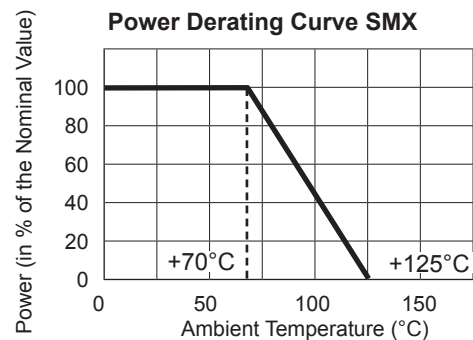
- Divider for an Universal Field of Applications
- Resistance Values from 100Ω to 10MΩ
- Standard TCR from ±5 ppm/K
- Rugged Epoxy Housing
- Low - Inductance
- Customized Solutions
- Short Delivery Times

### Spezifikation

Resistance Range*	100Ω - ≤100k (SMX), 100k -1MΩ (SHX)		
Resistance Ratio*	1:200		
Power	0,1Watt* to 0,5Watts for each Element		
Resistance Tolerance	Absolute*	Matching*	
	100Ω - ≤100k	±0,1%, ±0,2%, ±0,5%, ±1%	±0,02%, ±0,05%
Temperature Coefficient	Absolut	Tracking	
	±5ppm/K	±2ppm/K*	
	±10ppm/K		
	±25ppm/K		
Operating Temperature Range	-10°C to 75°C*		
Operating Voltage (max.)*	100VAC		
Insulation Resistance	>10 GOhm		
Current Noise*	25dB		
*Standard Type SMX, 100Ω - 100k, Values >100k are different			

### Mechanische Daten

Housing	Epoxy
Resistance Element	NiCr
Carrier	Steatit
Leads	Copper, Tin Plated



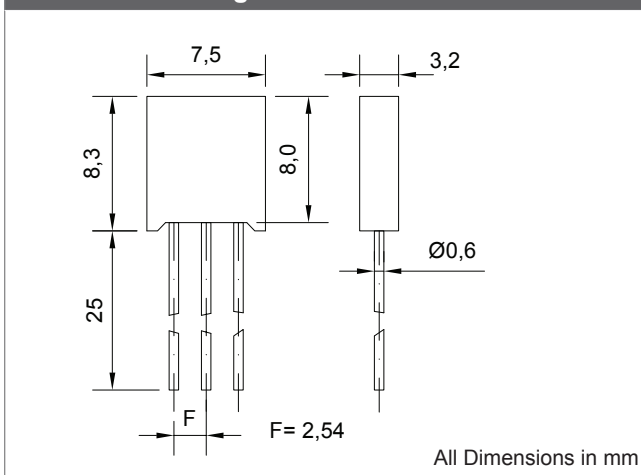
# Resistors

## Precision Voltage Divider

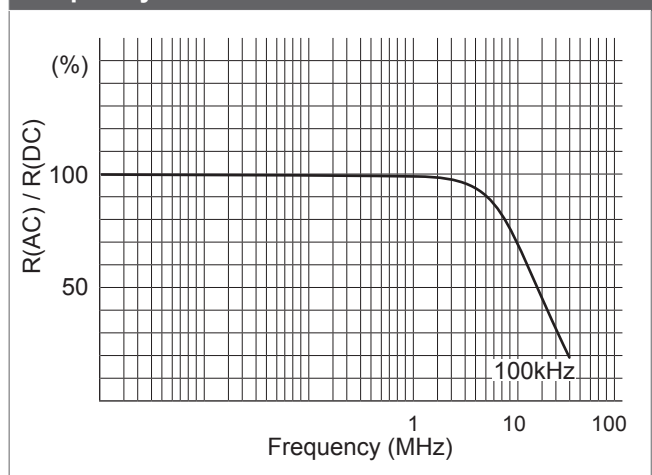
SMX / SHX - series

Parameter	Test	$\Delta R$
Load Life	90 min ON, 30 min OFF, 1000h at 70°C	$\pm 0,1\%$
Overload	2,5 x Related Voltage, 5 Seconds	$\pm 0,05\%$
Humidity	90 - 98% RH, Related Voltage, 240h, at 70°C to -10°C	$\pm 0,1\%$
Soldering Heat Resistance	350°C $\pm 5^\circ\text{C}$ , 3 Seconds	$\pm 0,05\%$
Solderability	245°C $\pm 5^\circ\text{C}$ 10 Seconds	50% Covered
Storage Life	15°C to 35°C, 15 - 75% RH, Load Free, 10000h	$\pm 0,02\%$

### Technical Drawing



### Frequency Characteristics



### Options

SHX Special Resistance Ratios (1:1000, 1:10000...), Resistance Values up to 1GOhm

### Ordering Information

SMX	WA0,1%	WM0,1%	TK5	10k/10k
Type*	Tolerance* (absolute)	Tolerance* (matching)	Temperature Coefficient* (absolut)	Resistance Value*
SMX SHX**	$\pm 0,1\%$ , $\pm 0,2\%$ , $\pm 0,5\%$ , $\pm 1\%$	$\pm 0,02\%$ , $\pm 0,05\%$	$\pm 5\text{ppm}$ $\pm 25\text{ppm}$ $\pm 25\text{ppm}$	(100 $\Omega$ - 100k $\Omega$ ) The total resistance must not exceed 100k $\Omega$ !

\*Standard Type SMX, 100 $\Omega$  - 100k, Values >100k are different

\*\*SHX, Values must be confirmed after feasibility check.