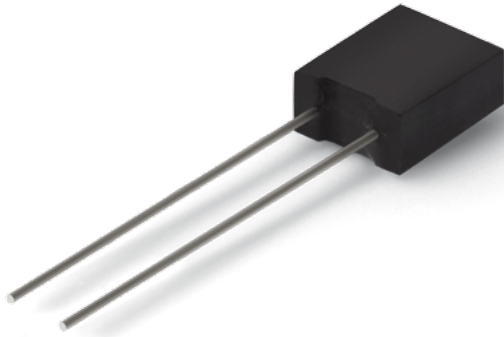


# Data Sheet for Precision Resistors

Metal Film Resistor (thin film)

Series UMX



- Universal precision resistor
- Resistance values from 10Ω..1MΩ
- TCR rate up to ±5ppm/°C
- Power rating up to 0.5 Watts @ 70°C
- Non-inductive and non-capacitive design
- Encapsulated epoxy housing

Electrical Specification	UMX 30	UMX 50
Resistance range	50Ω..100kΩ	10Ω..1MΩ
Resistance tolerance	±0.05%..±0.2%	
Power rating @ 70°C (0W @ +125°C)	0.25 W	0.5 W
Max. working voltage	350V	500V
TCR-rate	±5ppm/°C..±25ppm/°C	
Working temperature range (max.)	-55 °C up to +125 °C	

## Mechanical Specification

Resistance technology / material	Metal thin film
Housing material	Epoxy moulded
Connections	Radial brass tinned

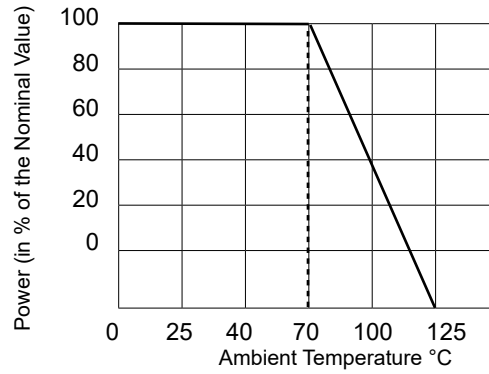
Parameters	Test Conditions (MIL-STD-202, JSS 50401, MIL-PRF-SS452)	Specification
Short time overload	2.5 x rated voltage, 5 sec.	ΔR ±0.05%
Life span	70°C, rated power, 90 min. on 30 min off, 1000 h	ΔR ±0.1%
High temperature / humidity	+65°..-10°C, 90..100% RH rated voltage, 10 cycles, 240h	ΔR ±0.1%
Temperature shock	-55°C. (30 min) +125°C (30 min), 5 cycles	ΔR ±0.05%
Solderability	235°C, 2 sec.	Coverage > 95%
Resistance to soldering heat	350°C, 3 sec.	ΔR ±0.03%
Isolation resistance	300 ±VDC, 1 min.	10GΩ
Noise		<-43 dB

# Data Sheet for Precision Resistors

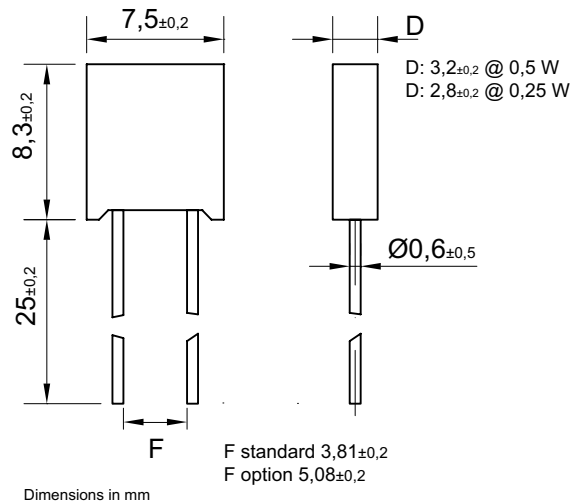
Metal Film Resistor (thin film)

Series UMX

## Power Derating Curve



## Technical Drawing



# Data Sheet for Precision Resistors

Metal Film Resistor (thin film)

Series UMX

## Order code

Description	Selection: <b>standard=black/bold</b> , possible <i>options=grey/italic</i>				
Series:	<b>UMX</b>				
Power rating: 0.25W (connections 3.81 mm) 0.50W (connections 5.08 mm)		<b>30</b> <b>50</b>			
Resistance tolerance: ±0.05% ±0.1% ±0.2%			<b>W0,05%</b> <b>W0,1%</b> <b>W0,2%</b>		
Temperature coefficient:: ±5ppm/°C ±10ppm/°C ±15ppm/°C ±25ppm/°C				<b>TK5</b> <b>TK10</b> <b>TK15</b> <b>TK25</b>	
Resistance value - please choose: From 50Ω to ≤ 100kΩ for 0.3W From 10Ω to ≤ 1MΩ for 0.5W					<b>xxxkxxx</b> <b>xxxxkxxx</b>

Order Example	Series	Power rating	Resistance tolerance	Temperature coefficient	Resistance value
Choice	UMX	0.25 W	±0.1%	5ppm/°C	10.1kΩ
Code	UMX	30	W0,1%	TK5	10k100