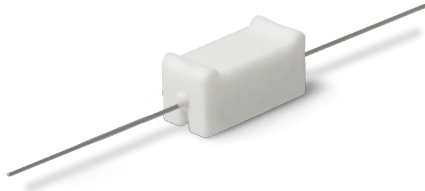


Flameproof Precision Resistor

MCU - series



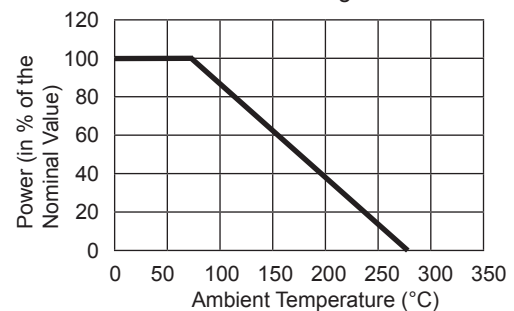
- Wire Wound Resistor, Inorganic Construction
- Power Rating up to 10Watt
- Any Resistance from 0,01Ω - 90kΩ
- Tolerances ±1% (to 0,01%)
- Standard TCR ±20ppm/K ab 10Ω
- Low Inductive Version (Option)

Specification	MCU-1	MCU-2	MCU-3	MCU-4	MCU-5
Resistance Range	0,01Ω - 22kΩ	0,01Ω - 22kΩ	0,01Ω - 45kΩ	0,01Ω - 65kΩ	0,01Ω - 90kΩ
Power	2Watt	3Watt	5Watt	10Watt	15Watt
Standard Tolerance	0,02%; 0,05%; 0,1%; 0,25%; 0,5%, 1%; 5%				
Temperature Coefficient	±20ppm/K (R ≥ 10Ω) ±50ppm/K (1Ω ≥ R < 10Ω) ±90ppm/K / 120ppm (R < 0,1Ω)				
Operating Temperature Range	-55 °C - 275 °C				
Operating Voltage (max.)	200V	250V	470V	800V	1150V
Withstanding Voltage	1000 VAC				
Insulation Resistance	≥ 1GOhm				

Mechanical Data

Housing	Ceramics, Compound
Resistance Element	Wire, Special Alloy
Carrier	Multi - Chamber Coil
Leads	Copper, Tin Plated

Power Derating Curve

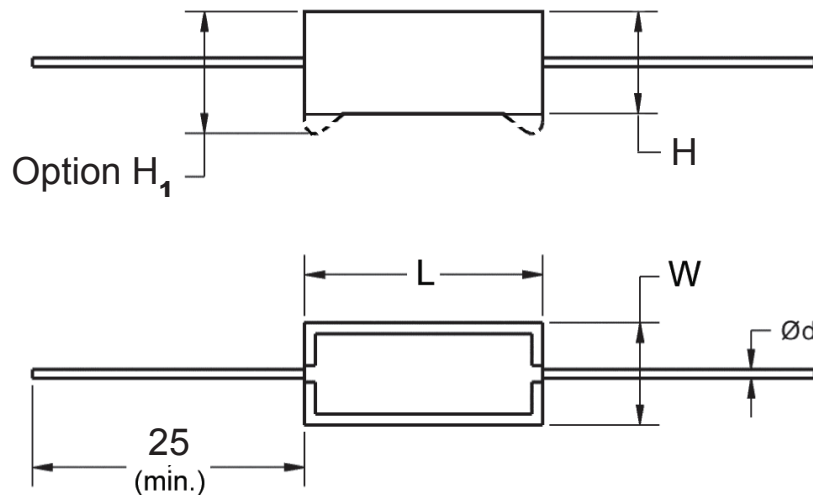


Parameter	Test	Δ R
Load Life	90 min ON, 30 min OFF, 1000h at 25°C	±1% + 0,05Ω
Shelf Life	15°C - 35°C, r.H. 15 - 75%, 10000h	±0,2% + 0,05Ω
Humidity	90 - 95% RH, 0,1W, 1000h at 40°C	±0,2% + 0,05Ω
Temperature Cycle	-55°C 30 min, +155°C 30min. 1000h	±0,2% + 0,05Ω
5X Overload (5s)		±0,2% + 0,05Ω
Shock	IEC 60068-2-27 10G, 6ms, Saw Tooth	±0,1% + 0,05Ω
Soldering Heat Resistance	350°C ±5°C 3 Seconds	±0,1% + 0,05Ω

Flameproof Precision Resistor

MCU - series

Technical Drawing



Dimensions

	L	H	H ₁ (Option)	W	Ød
MCU-1	17,8 ±1,0	6,2 ±1,0	7,6 ±1,0	6,5 ±0,4	0,8 ±0,4
MCU-2	22,2 ±1,0	7,9 ±1,0	9,5 ±1,0	7,9 ±0,4	0,8 ±0,4
MCU-3	22,2 ±1,0	9,5 ±1,0	11,1 ±1,0	9,5 ±0,4	0,8 ±0,4
MCU-4	48 ±1,0	9,5 ±1,0	12,7 ±1,0	9,5 ±0,4	1 ±0,4
MCU-5	48 ±1,0	12,7 ±1,0	15,9 ±1,0	12,7 ±0,4	1 ±0,4

All Dimensions in mm

Options

Remark

Option H ₁	With distance holder (upon request)
Low Inductive Version (upon Request)	Non inductive windings, only half resistance value possible, TCR: 120ppm

Ordering Information

MCU-2 Type	W1% Resistance Tolerance ±0,01%; ±0,05%; ±0,25% ; ±0,5%; ±1%	TK50 Temperature Coefficient >10Ω: ±20ppm/K 1Ω bis 10Ω: ±50ppm/K <1Ω: ±90ppm/K	10k000 Resistance Range (0,01Ω - 91kΩ)	N Option H ₁ distance holder N low inductive
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