

## Molded Metal Film Resistors Low Temperature Coefficient, High Precision



The RCME range of metal film resistors represents a significant technical advancement in resistive technology combining low temperature coefficients with high environmental stabilities, and high frequency performance.

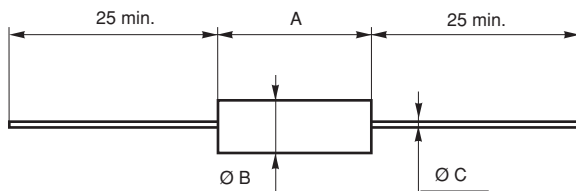
Laser beam trimming gives tolerance accuracies from 0.1% to 1%.

The RCME range effectively bridges the gap that has hitherto existed between the high precision, high stability foil or wirewound technology and conventional film technology.

### FEATURES

- 0.125W to 0.25W at 85°C
- Very Low temperature coefficient:  $\pm 5$  and  $\pm 10$ ppm/°C
- Very tight tolerances: up to  $\pm 0.1\%$
- Electrical insulation  $>10^7 M\Omega$
- Climatic category – 65°C/+ 155°C/56 days
- High frequency performance

### DIMENSIONS in millimeters



DIMENSIONS SERIES	A	Ø B	Ø C	UNIT WEIGHT IN G
RCME02	6.5 ± 0.2	2.4 ± 0.1	0.6	0.26
RCME05	10.2 ± 0.2	3.65 ± 0.1	0.6	0.46

TECHNICAL SPECIFICATIONS		
VISHAY SFERNICE SERIES	RCME02	RCME05
Power Rating at 85°C	0.125W	0.25W
Ohmic Range	100Ω to 750kΩ	
Resistance Tolerance	$\pm 0.1\%$ - $\pm 0.2\%$ - $\pm 0.5\%$ - $\pm 1\%$	
Nominal Temperature Coefficient in the Range – 20° + 85°C	K6 $\leq \pm 10$ ppm/°C K8 $\leq \pm 5$ ppm/°C	
Maximum Voltage	300V	350V
Insulation Resistance	$>10^7 M\Omega$	
Voltage Coefficient	0.0001% / Volt	
Environmental Specifications	– 65°C / + 155°C / 56 days	

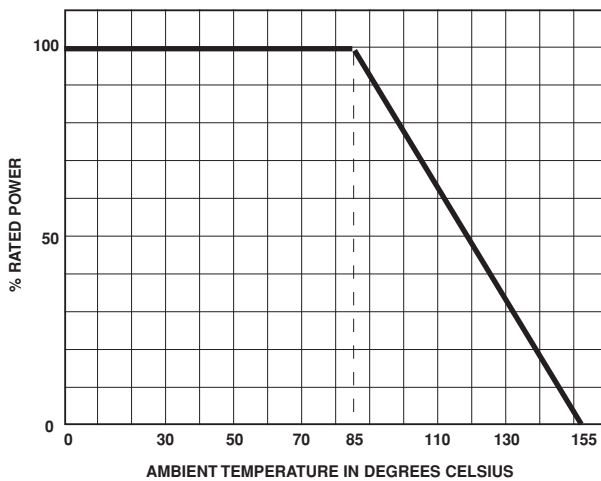


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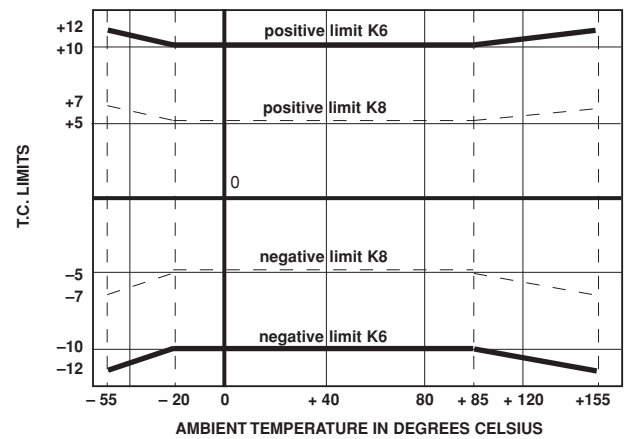
Vishay Sfernice

PERFORMANCE		
NF C 83-230		MAXIMUM VALUES AND DRIFTS
TESTS	CONDITIONS	
Load Life at max. Category Temperature	1000 h at + 155°C 0% of Pn	± 0.15% or 0.05Ω
Short Time Overload	2.5 Um/5 s limited to 2 Un	± 0.01% or 0.05Ω
Damp Heat Humidity (Steady State)	56 days with low load	± 0.15% or 0.05Ω
Rapid Temperature Change	- 55°C + 155°C	± 0.05% or 0.05Ω
Climatic Sequence	- 55°C severity 1 + 155°C	± 0.15% or 0.05% Insulation resist. >10 <sup>6</sup> MΩ
Terminal Strength	Pull - Twist - 2 bends	± 0.05% or 0.05Ω
Vibration	Severity 55B	± 0.05% or 0.05Ω
Soldering (Thermal Shock)	+ 260°C 10 s	± 0.05% or 0.05Ω
Load Life	cycle 90°/30° 1000 h at Pn at 85°C	± 0.05% or 0.05Ω
Shelf Life	1 year ambient temperature	± 0.03% or 0.05Ω

POWER RATING CHART



TEMPERATURE COEFFICIENT



The temperature coefficient is guaranteed between - 20°C + 85°C.

The limits of T.C. are : K 8 ± 5ppm/°C

and K 6 ± 10ppm/°C

For use outside the range - 20°C or + 85°C, limit values of temperature coefficient are given in the graph above.

**MARKING**

Printed: SFERNICE trademark, series, style (in full or abbreviated), ohmic value (in  $\Omega$ ), tolerance (in %), temperature coefficient, manufacturing date.

**ORDERING INFORMATION**

RCME	02		100K $\Omega$	$\pm 0.1\%$	K6	
SERIES	STYLE	SPECIAL DESIGN	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING
		Method N° Optional				Optional