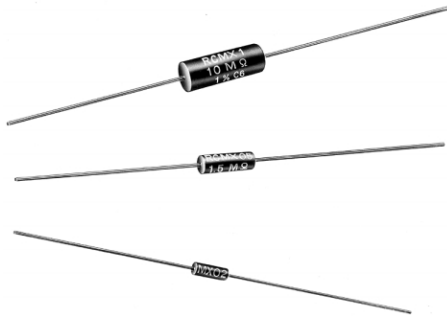


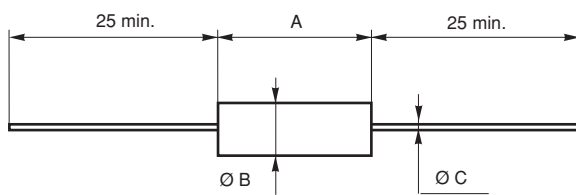
## Molded Metal Film High Ohmic Value Resistors



### FEATURES

- 0.125W to 0.5W at 70°C
- NF C 83-230
- CECC 40 100
- Resistance range: 300kΩ to 50MΩ
- Good initial precision: up to ± 0.5%
- High stability
- Accurate dimensions
- High insulation
- Limiting element voltages: 500V, 800V and 1200V

### DIMENSIONS in millimeters



SERIES	DIMENSIONS	A	Ø B	Ø C	UNIT WEIGHT IN g.
RCMX02		6.5 ± 0.2	2,5 <sup>-0</sup> <sub>-0.2</sub>	0.6	0.26
RCMX05		10.2 ± 0.2	3.65 ± 0.1	0.6	0.46
RCMX1		16 ± 0.5	6.2 ± 0.2	0.8	1.30

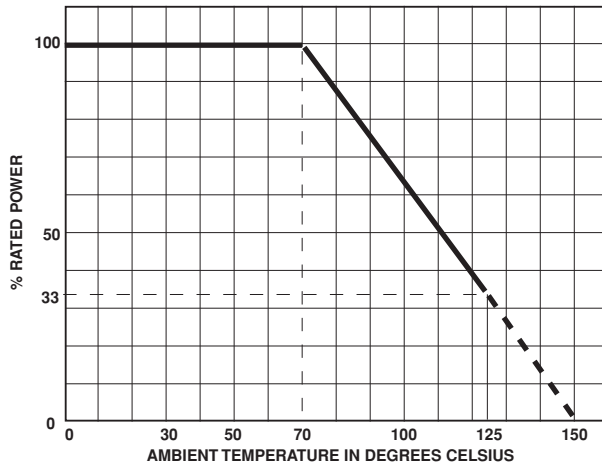
TECHNICAL SPECIFICATIONS			
VISHAY SFERNICE SERIES	RCMX02	RCMX05	RCMX1
NF C / CECC 83-230	RS80	RS81	RS82
Power Rating at 70°C	0.125W	0.250W	0.500W
Resistance Value Range	300kΩ to 10MΩ	1MΩ to 20MΩ	2MΩ to 50MΩ
Tolerance and Associated Series	± 0.5% E48	± 1% E96	± 5% E24
Maximum Voltage	500V	800V	1200V
Critical Resistance	2MΩ	2.55MΩ	2.87MΩ
Temperature Coefficient Rated in the Range - 55°C + 125°C	K3 ≤ ± 50ppm/°C		
Insulation Resistance (Typical)	≥ 10 <sup>7</sup> MΩ (500VDC)		
Voltage Coefficient	≤ 10ppm/Volt		
Environmental Specifications	- 65°C/+ 155°C/10 days		

Undergoes European Quality Insurance System (CECC) in ohmic value range 300kΩ - 2,2 MΩ

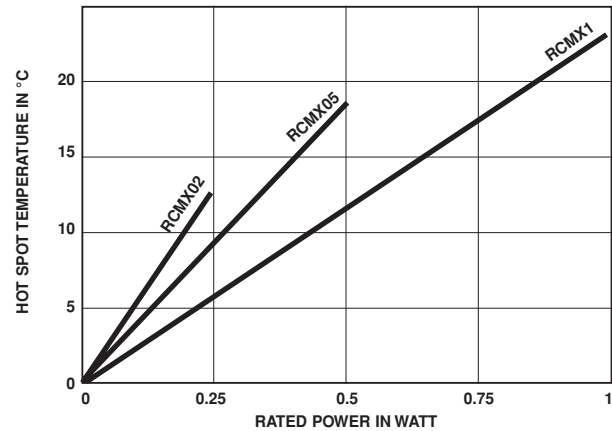


PERFORMANCE			
NF C 83-230 - CECC 40 100			TYPICAL VALUES AND DRIFTS
TESTS	CONDITIONS	REQUIREMENTS	
Load Life at max. Category Temperature	1000 h at 125°C 33% of Pn	$\leq \pm 1\%$ Insulation resist. $> 1G\Omega$	$\pm 2\%$ at 1000 h Insulation resist. $10^6M\Omega$
Short Time Overload	2.5Um/5s limited to 2Un	$\leq \pm 0.25\%$	$\pm 0.5\%$
Damp Heat Humidity (Steady State)	10 days with low load	$\leq \pm 1\%$ Insulation resist. $> 10^2M\Omega$	$\pm 1.5\%$
Rapid Temperature Change	- 55°C + 125°C	$\leq \pm 0.25\%$	$\pm 0.25\%$
Climatic Sequence	- 55°C + 125°C severity 1	$\leq \pm 1\%$ Insulation resist. $> 100M\Omega$	$\pm 1\%$ Insulation resist. $10^6M\Omega$
Terminal Strength	Pull - Twist - 2 bends	$\leq \pm 0.25\%$	$\pm 0.05\%$
Vibration	10 to 500Hz	$\leq \pm 0.25\%$	$\pm 0.05\%$
Soldering (Thermal Shock)	+ 260°C 10s	$\leq \pm 0.25\%$	$\pm 0.1\%$
Load Life	cycle 90'/30' 1000h at Pn at 70°C	$\leq \pm 1\%$ Insulation resist. $> 1G\Omega$	$\pm 0.5\%$ Insulation resist. $10^6M\Omega$
Shelf Life	1 year ambient temperature	-	$\pm 0.25\%$

## POWER RATING CHART



## TEMPERATURE RISE



## PRACTICAL OPERATING TOLERANCES

After 1000 hours load life at rated power 90'/30' cycles + 70°C ambient temperature, the typical total drifts, measured at + 70°C, are as follows :

Typical total drift = drift due to T.C. (K3) + life drift 0.5%.

Maximum deviation from rated ohmic value including  $\pm 1\%$  manufacturing tolerance  $\leq 1.5\%$ .

## MARKING

Printed: VISHAY SFERNICE trademark, series, style, ohmic value (in  $\Omega$ ), tolerance (in %), temperature coefficient, manufacturing date. **Due to lack of space RCMX02 is printed MX02.**

ORDERING INFORMATION						
RCMX	02		10M $\Omega$	$\pm 5\%$	K3	
SERIES	STYLE	SPECIAL DESIGN	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING
		Method N° Optional				Optional