

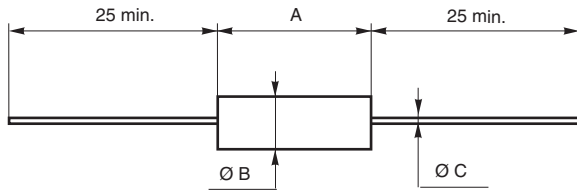
## Molded Metal Film Resistors



### FEATURES

- 0.25W to 1W at 70°C
- NF C 83-230 (RC21U-31U-41U-32)
- CECC 40 100
- High insulation >10<sup>7</sup>MΩ
- Excellent reliability
- Great mechanical strength

### DIMENSIONS in millimeters



SERIES	DIMENSIONS	A	Ø B	Ø C	UNIT WEIGHT IN G.
RCMM02		6.5 ± 0.2	2.5 <sup>-0</sup> <sub>-0.2</sub>	0.6	0.26
RCMM05		10.2 ± 0.2	3.65 ± 0.1	0.6	0.46
RCMM1		16 ± 0.5	6.2 ± 0.2	0.8	1.30

TECHNICAL SPECIFICATIONS					
VISHAY SFERNICE SERIES		RCMM02		RCMM05	RCMM1
NF C / CECC 83-230		RC21U	RC32	RC31U	RC41U
CECC 40 100-802		BV	–	CV	–
MIL-R-22684 (Conformity)		RLR07	–	RLR20	RLR32
Power Rating at 70°C		0.25W	0.50W	0.50W	1W
Resistance Value Range in Relation to Tolerance	± 5%	1Ω to 330kΩ E24	1Ω to 330kΩ E24	1Ω to 1MΩ E24	1Ω to 2.2MΩ E24
	± 2%	1Ω to 332kΩ E48	1Ω to 332kΩ E48	1Ω to 1MΩ E48	1Ω to 2.26MΩ E48
Maximum Voltage		300V	350V	350V	500V
Critical Resistance		–	245kΩ	245kΩ	250kΩ
Temperature Coefficient	Rated in the range – 55°C + 155°C	K2 Ω ±100ppm/°C			
	Typical in the range – 10°C + 70°C	Ω ± 50ppm/°C			
Insulation Resistance (Typical)		Ω 10 <sup>7</sup> MΩ (500 VDC)			
Voltage Coefficient		Ω ± 10ppm/Volt			
Environmental Specifications		– 65°C/+155°C/56 days			

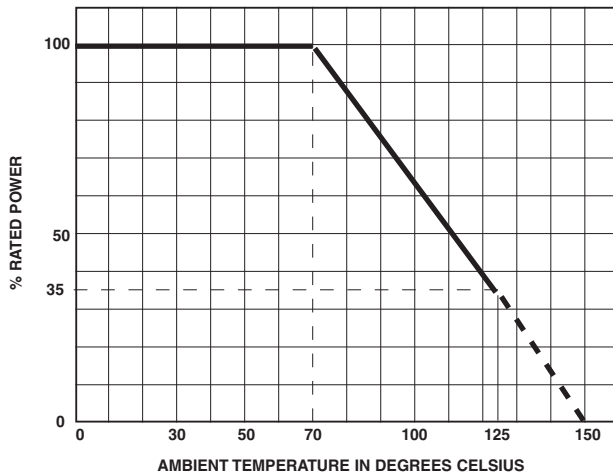
Undergoes European Quality Insurance System (CECC)



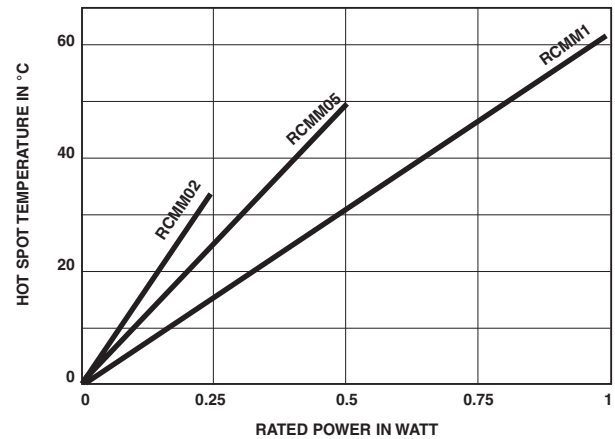
<b>PERFORMANCE</b>			
NF C 83-230 - CECC 40 100			TYPICAL VALUES AND DRIFTS
TESTS	CONDITIONS	REQUIREMENTS	
Load Life at max. Category Temperature	1000h at 125°C 35% of Pn	$\Omega \pm (2\% + 0.1\Omega)$ Insulation resist. > 1G $\Omega$	$\pm 0.75\%$ or 0.05 $\Omega$ Insulation resist. 10 <sup>6</sup> M $\Omega$
Short Time Overload	2.5Um/5s*	$\Omega \pm (0.5\% + 0.05\Omega)$	$\pm 0.2\%$ or 0.05 $\Omega$
Damp Heat Humidity (Steady State)	56 days with low load	$\Omega \pm (2\% + 0.1\Omega)$ Insulation resist. >100M $\Omega$	$\pm 0.5\%$ or 0.05 $\Omega$ Insulation resist. 10 <sup>6</sup> M $\Omega$
Rapid Temperature Change	- 55°C + 125°C	$\Omega \pm (0.5\% + 0.05\Omega)$	$\pm 0.1\%$ or 0.05 $\Omega$
Climatic Sequence	- 55°C + 125°C	$\Omega \pm (2\% + 0.1\Omega)$ Insulation resist. >100M $\Omega$	$\pm 0.1\%$ or 0.05 $\Omega$ Insulation resist. 10 <sup>6</sup> M $\Omega$
Terminal Strength	Pull - Twist - 2 bends	$\Omega \pm (0.5\% + 0.05\Omega)$	$\pm 0.05\%$ or 0.05 $\Omega$
Vibration	10 - 500Hz	$\Omega \pm (0.5\% + 0.05\Omega)$	$\pm 0.05\%$ or 0.05 $\Omega$
Soldering (Thermal Shock)	+ 260°C 10s	$\Omega \pm (0.5\% + 0.05\Omega)$	$\pm 0.1\%$ or 0.05 $\Omega$
Load Life	cycle 90'/30' 1000h at Pn at 70°C	$\Omega \pm (2\% + 0.1\Omega)$ Insulation resist. > 1G $\Omega$	$\pm 0.5\%$ or 0.05 $\Omega$ Insulation resist. 10 <sup>6</sup> M $\Omega$
Shelf Life	1 year ambient temperature	-	$\pm 0.1\%$ or 0.05 $\Omega$

\*RC41: 15 seconds

**POWER RATING CHART**



**TEMPERATURE RISE**



**MARKING**

Printed: SFERNICE trademark, series, style, ohmic value (in  $\Omega$ ), tolerance (in %), temperature coefficient, manufacturing date. Due to lack of space RCMM02 is printed MM02.

**ORDERING INFORMATION**

RCMM	02		332k $\Omega$	$\pm 1\%$	K3	
SERIES	STYLE	SPECIAL DESIGN	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING
		Method N° Optional				Optional



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