Vishay Sfernice



Enamelled Wirewound Power Resistors Axial Leads



As a result of more than 50 years of experience and continuous improvements the RWM Series of resistors features proven reliability in AC or DC applications.

The high quality of the RWM resides mainly in the use of a proprietary VISHAY SFERNICE enamel fired at high temperature and free from any compound liable to corrode the resistive wire.

FEATURES

- High dissipation up to 30 W (25 °C)
- Fire Proof

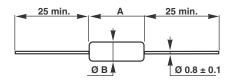


- Excellent Endurance typical drift ± 1.5 % after compliant 1000 hours
- Conformal Vitreous Enamel
- All Welded Construction
- Low ohmic values 0.1 Ω available
- Termination: Sn/Ag/Cu

The performance of this series of professional resistors fully meets the requirements of the following specifications:

- NF C 83-210-001
- CECC 40201-001
- BS CECC 40201-002

DIMENSIONS in millimeters



TECHNICAL SPECIFICATIONS												
VISHAY SFERNICE STYLES	DESIGNATIONS		POWER RATING		Ohmic Range in	Qualified		0-1111	DIMENSIONS IN mm			
	CECC 40201 -001	CECC 40201 -002	at + 70 °C	at + 25 °C	With Surface Temp. ≤ + 450 °C	Relation to Tolerance ± 5 % E24 Series	Ohmic Range NF C 83-210	Limiting Element Voltage	Critical Resis- tance	A	ØВ	WEIGHT IN g
RWM 4 x 10	RB59	JB	2.6 W	3 W	5.5 W	0.1 Ω 10 kΩ	0.1 Ω 10 kΩ	120 V	4.8 kΩ	12 ± 1	5.5 ± 1	1
■ RWM 4 x 22	RB61	НВ	4.5 W	5 W	7 W	0.1 Ω 16 kΩ	0.1 Ω 6.8 kΩ	300 V	-	22.1 ± 1	5.5 ± 1	2
■ RWM 5 x 26	RB57	-	6 W	7 W	10 W	0.1 Ω 27 kΩ	0.15 Ω 10 kΩ	350 V	18.8 kΩ	24.7 ± 1	7.4 ± 1.5	3
■ RWM 6 x 22	RB57	KB	6 W	7 W	10 W	0.1 Ω 39 kΩ	0.15 Ω 39 kΩ	350 V	17.5 kΩ	18 ± 1	6.5 ± 1	2.2
RWM 8 x 26	RB60	-	7 W	8 W	10 W	0.1 Ω 27 kΩ	-	500 V	-	24.7 ± 1	7.4 ± 1.5	3
■ RWM 6 x 34	RB60	LB	7 W	8 W	12 W	0.33 Ω 36 kΩ	0.33 Ω 15 kΩ	500 V	31 kΩ	33.7 ± 1	7.4 ± 1.5	4
RWM 8 x 34	RB58	-	9.5 W	11 W	14 W	0.33 Ω 36 kΩ	-	650 V	-	33.7 ± 1	7.4 ± 1.5	4
RWM 8 x 45	RB58	МВ	9.5 W	11 W	20 W	0.47 Ω 62 kΩ	0.47 Ω 33 kΩ	650 V	38 kΩ	45.8 ± 2	9.4 ± 1.5	8
RWM 10 x 45	-	-	21 W	25 W	25 W	0.47 Ω 62 kΩ	-	800 V	25.6 kΩ	45.8 ± 2	9.4 ± 1.5	8
RWM 10 x 64	-	-	21 W	25 W	25 W	0.68 Ω 100 kΩ	-	800 V	25.6 kΩ	63.8 ± 1	9.4 ± 1.5	14
RWM 10 x 65	-	-	25.8 W	30 W	30 W	0.68 Ω 100 kΩ	-	800 V	21.3 kΩ	63.8 ± 1	9.4 ± 1.5	14

Undergoes European Quality Insurance System (CECC)



Enamelled Wirewound Power Resistors Axial Leads

Vishay Sfernice

PERFORMANCE								
	TVDIOAL DDIETO							
TESTS	CONDITIONS	REQUIREMENTS	TYPICAL DRIFTS					
Short Time Overload	10 Pr during 10 s 25 °C ambient	± (2 % + 0.1 Ω)	± (0.5 % + 0.05 Ω)					
Temperature Cycling	- 55 °C + 200 °C	± (1 % + 0.05 Ω)	± (0.5 % + 0.05 Ω)					
Humidity (Steady State)	56 days 40 °C Ambient - R.H. 95 %	± (5 % + 0.1 Ω)	± (0.5 % + 0.05 Ω)					
Terminal Strength	Tensile test: 20 N 2 successive bending 2 full rotations of 180°	± (1 % + 0.05 Ω)	± (0.1 % + 0.05 Ω)					
Load Life	1000 h at Pr 90/30 Cycle 25 °C ambient	± (5 % + 0.1 Ω)	± (1.5 % + 0.05 Ω)					

OVERLOAD

Heavy overloads can be endured in the form of short pulses < 0.1 s. Particular requirements should be submitted to Vishay Sfernice, specifying peak voltage, cycle and environmental conditions.

RECOMMENDATIONS FOR USE

Since these components are high dissipation power resistors, customers are advised to use a high melting point solder.

For low ohmic values, the measurement becomes critical and the connecting wires resistance is to be included. The value is measured at 5 mm from the resistor body.

Group Mounting

In a still atmosphere, a distance between axes equal to five times the resistor's diameter is recommended.

Cabinet Mounting

- Unventilated box: dissipation should be reduced (see dimensional drawing).
- Forced ventilation: if conditions are appropriate, dissipation may be doubled or even trebled.
- \bullet In any case: the surface temperature at the hottest point should not exceed 450 $^{\circ}\text{C}.$

These aspects should be considered by the end user.

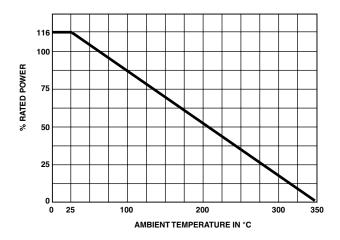
ELECTRICAL SPECIFICATIONS					
Tolerance	± 5 %				
	On request	± 1 % and ± 2 %			
Temperature Coefficient	+ 75 ppm/°C typical				
Dielectric Withstanding	y Voltage NF EN 140000	500 V _{RMS} - 1 minute - 10 mA			
Inductance		non inductive (Ayrton-Perry) winding available			

Vishay Sfernice

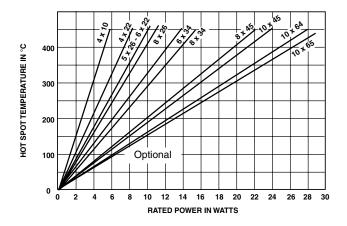
Enamelled Wirewound Power Resistors Axial Leads



POWER RATING CHART



TYPICAL TEMPERATURE RISE



MARKING

Sfernice trademark, model and style, CECC style, if applicable (except for the smallest model due to lack of space: (4 x 10 or RB 59), ohmic value, resistance tolerance, manufacturing date (year - month).

ORDERING INFORMATION								
RWM	4 x 10		XXX	150U	± 5 %	AM500	e1	
MODEL	STYLE	NI OPTIONAL	SPECIAL DESIGN	OHMIC VALUE	TOLERANCE	PACKAGING	LEAD (Pb)-FREE	
		Non Inductive Winding	Method N° Optional	Custom items are subject to extra charge and min. order. Please see price list.				

SAP PART NUMBERING GUIDELINES									
RWM	0410	1500	J	A20	E1				
MODEL	STYLE	OHMIC VALUE	TOLERANCE	PACKAGING	LEAD (Pb)-FREE				

Document Number: 50008 Revision: 30-Aug-07

Legal Disclaimer Notice



Vishay

Notice

Specifications of the products displayed herein are subject to change without notice. Vishay Intertechnology, Inc., or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Vishay's terms and conditions of sale for such products, Vishay assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of Vishay products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Vishay for any damages resulting from such improper use or sale.

www.vishay.com Revision: 08-Apr-05