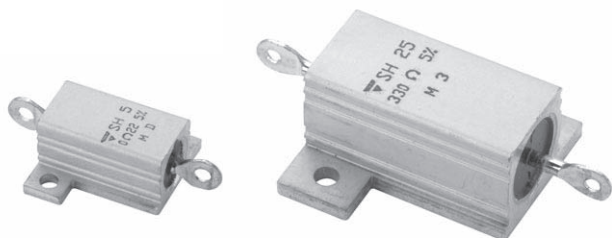


Heatsink Encased Wirewound Power Resistors Industrial Applications



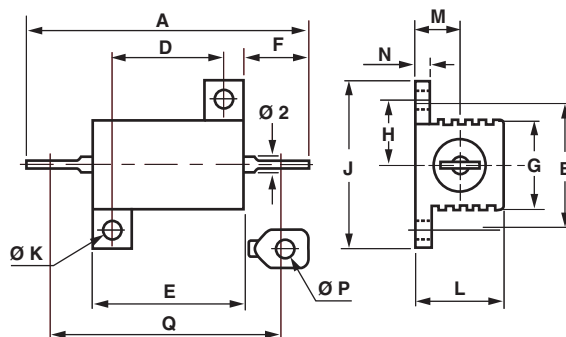
FEATURES

- ≤ 50 W at + 25 °C
- High power characteristics
- Utilize heatsink capability
- Good mechanical protection
- Industrialized product
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

Built for high power dissipation applications, these components have very good overall characteristics for industrial use under harsh environmental conditions.

DIMENSIONS in millimeters



SERIES	A	B ± 0.2	D ± 0.2	E ± 0.5	F	G ± 1	H ± 0.7	J ± 0.5	Ø K ± 0.1	L MAX.	M ± 0.5	N ± 0.3	Ø P MIN.	Q	WEIGHT g
SH5	28.5 ± 1.5	12.5	11.3	16.3	6.8 ± 1.5	8.5	6.2	16.4	2.4	8.9	4.3	1.6	2.1	25.3 ± 1.5	3
SH10	35.5 ± 1.5	15.9	14	19	7.9 ± 1.5	11	7.9	20.6	2.4	11	5.6	2	2.1	30.6 ± 1.5	8.8
SH25	49 ± 1.3	19.8	18.3	28	11.1 ± 1.5	14	9.9	27.5	3.2	15	8	2.4	2.1	44.6 ± 1.3	16.5
SH50	70.2 ± 1.4	21.4	39.7	50	11 ± 1.2	15.5	10.7	29.4	3.2	15	8	2.4	2.1	66.5 ± 1.4	30.8

STANDARD ELECTRICAL SPECIFICATIONS

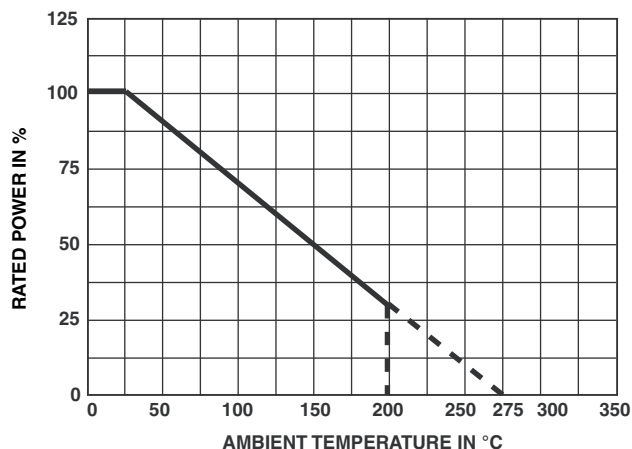
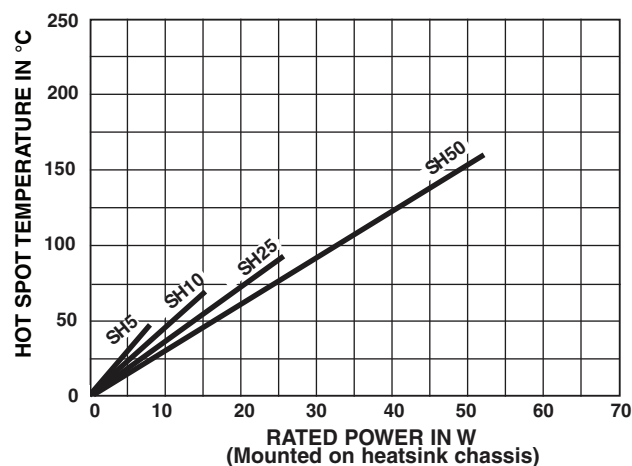
MODEL	RESISTANCE RANGE Ω	RATED POWER $P_{25\text{ }^{\circ}\text{C}}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE ± %
SH5	0.1 to 3.3K	10	160	5
SH10	0.1 to 15K	12.5	250	5
SH25	0.1 to 33K	25	550	5
SH50	0.1 to 51K	50	1285	5

TECHNICAL SPECIFICATIONS

VISHAY SFERNICE SERIES		SH5	SH10	SH25	SH50
Power Rating	at 25 °C	10 W	12.5 W	25 W	50 W
Chassis mounted resistors: 413 cm ² for SH5 and SH10, 536 cm ² for SH25 and SH50	at 70 °C	8 W	10 W	20 W	40 W
Unmounted resistors	at 25 °C	4 W	6 W	9 W	12 W
	at 70 °C	3.2 W	4.8 W	7.2 W	9.6 W
Dielectric Strength V _{RMS}		800 V	1000 V	2000 V	2000 V
Insulation Resistance		> 10 ⁴ MΩ		> 3 x 10 ⁴ MΩ	
Temperature Coefficient		± 50 ppm/°C		R _n > 50 Ω	
Climatic Category		55/200/56			
Temperature Limits		- 55 °C		+ 200 °C	

**PERFORMANCE**

TESTS	CONDITIONS	TYPICAL DRIFTS
Momentary Overload	5 P_N /5 s	± 0.5 % max. + 0.05 Ω
Climatic Sequence	- 55 °C + 200 °C 5 cycles	± 1 % max. + 0.05 Ω
Load Life	Nominal power P_N 1000 h at 25 °C	± 1 % max. + 0.05 Ω

POWER RATING**TEMPERATURE RISE****MARKING**

Vishay Sfernice trademark, model, style, nominal resistance (in Ω), tolerance (in %), manufacturing date.

PACKAGING

Bag of 10 units

ORDERING INFORMATION

SH	25	10 k Ω	5 %	BA10	e1
MODEL	STYLE	OHMIC VALUE	TOLERANCE	PACKAGING	LEAD (Pb)-FREE

SAP PART NUMBERING GUIDELINES

SH	25	10001	J	S03
MODEL	STYLE	OHMIC VALUE	TOLERANCE	PACKAGING



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.