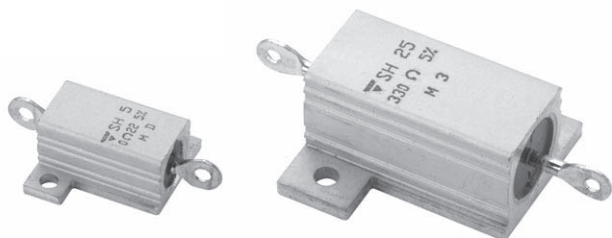


## Heatsink Encased Wirewound Power Resistors Industrial Applications



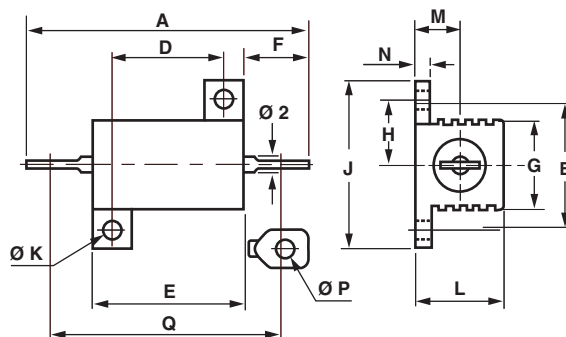
### FEATURES

- $\leq 50$  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](http://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 $\Omega$	RATED POWER $P_{25^\circ\text{C}}$ 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

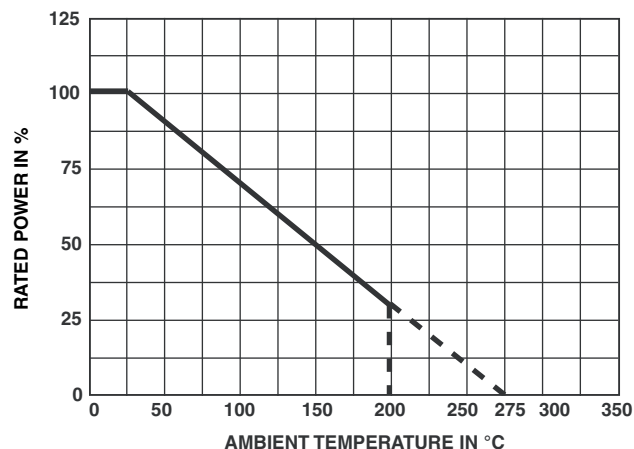
### TECHNICAL SPECIFICATIONS

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 <sup>2</sup> for SH5 and SH10, 536 cm <sup>2</sup> 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 <sub>RMS</sub>		800 V	1000 V	2000 V	2000 V
Insulation Resistance		> 10 <sup>4</sup> MΩ		> 3 x 10 <sup>4</sup> MΩ	
Temperature Coefficient		± 50 ppm/°C		R <sub>n</sub> > 50 Ω	
Climatic Category		55/200/56			
Temperature Limits		- 55 °C		+ 200 °C	

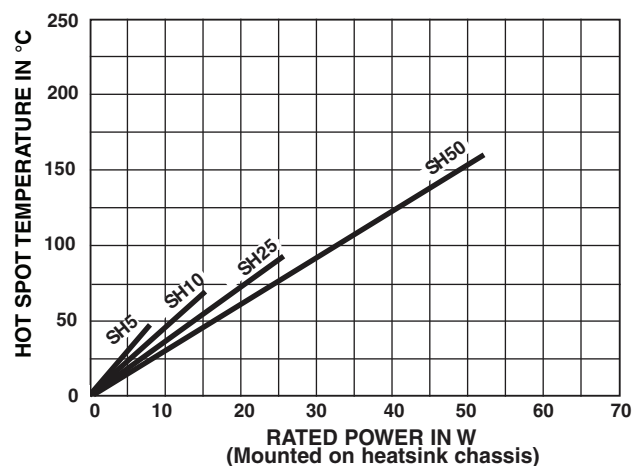


PERFORMANCE		
TESTS	CONDITIONS	TYPICAL DRIFTS
Momentary Overload	$5 P_n/5$ s	$\pm 0.5$ % max. + 0.05 $\Omega$
Climatic Sequence	- 55 °C + 200 °C 5 cycles	$\pm 1$ % max. + 0.05 $\Omega$
Load Life	Nominal power $P_n$ 1000 h at 25 °C	$\pm 1$ % max. + 0.05 $\Omega$

## POWER RATING



## TEMPERATURE RISE



## MARKING

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

## PACKAGING

Bag of 10 units

ORDERING INFORMATION					
SH	25	10 k $\Omega$	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



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