

Heatsink Encased Wirewound Power Resistors Industrial Applications



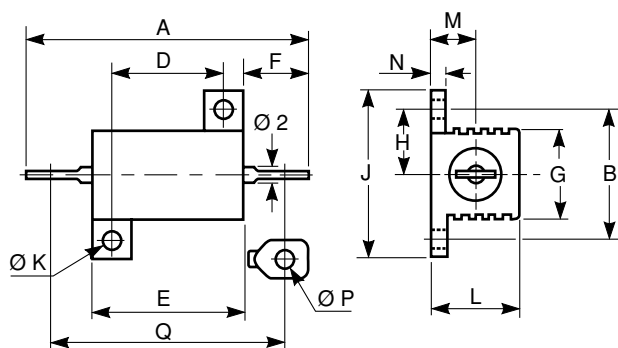
FEATURES

- ≤ 50 Watt at $+ 25^{\circ}\text{C}$
- High power characteristics
- Utilize heatsink capability
- Good mechanical protection
- Industrialized product

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

DIMENSIONS in millimeters

SH



MODEL AND STYLE	SH5	SH10	SH25	SH50
A	28.5 ± 1.5	35 ± 1.5	49 ± 1.3	70.2 ± 1.4
B ± 0.2	12.5	5.9	19.8	21.4
D ± 0.2	11.3	14	18.3	39.7
E ± 0.5	16.3	19	28	50
F	6.8 ± 1.5	7.9 ± 1.5	11.1 ± 1.5	11 ± 1.2
G ± 1	8.5	11	14	15.5
H ± 0.7	6.2	7.9	9.9A	10.7
J ± 0.5	16.4	20.6	27.5	29.4
Ø K ± 0.1	2.4	2.4	3.2	3.2
L max.	8.9	11	15	15
M ± 0.5	4.3	5.6	8	8
N ± 0.3	1.6	2	2.4	2.4
Ø P min.	2.1	2.1	2.1	2.1
Q	25.3 ± 1.5	30.6 ± 1.5	44.6 ± 1.3	66.5 ± 1.4
Weight in g	3	8.8	16.5	30.8

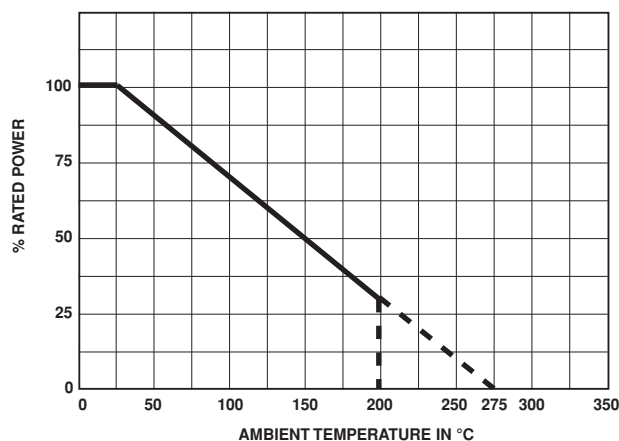
ELECTRICAL SPECIFICATIONS

VISHAY SFERNICE MODEL AND STYLE			SH5	SH10	SH25	SH50
Power Rating	Chassis mounted resistors: 413cm ² for SH5 and SH10 536cm ² for SH25 and SH50	at 25°C	10W	12.5W	25W	50W
		70°C	8W	10W	20W	40W
	Unmounted resistors	at 25°C	4W	6W	9W	12W
		70°C	3.2W	4.8W	7.2W	9.6W
Ohmic Value			0.1Ω 3.3kΩ	0.1Ω 15kΩ	0.1Ω 33kΩ	0.1Ω 51kΩ
Tolerance			± 5%			
Rated Maximum Voltage			160V	250V	550V	1285V
Dielectric Strength VRMS			800V	1000V	2000V	2000V
Insulation Resistance			> 10 ⁴ MΩ		> 3.10 ⁴ MΩ	
Temperature Coefficient			± 50ppm/°C Rn > 50Ω			
Climatic Category			55/200/56			
Temperature Limits			− 55°C + 200°C			

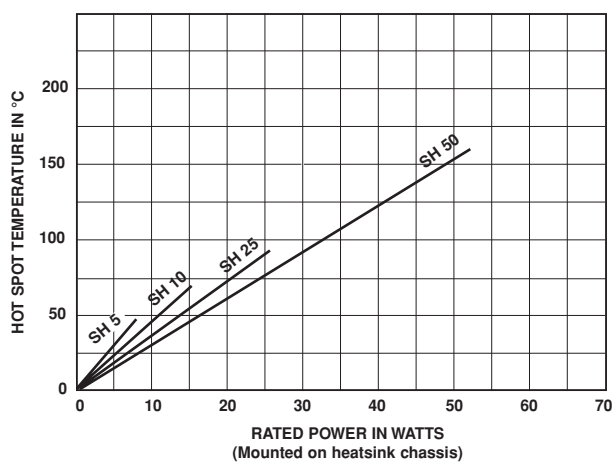


PERFORMANCE		
TESTS	CONDITIONS	TYPICAL DRIFTS
Momentary Overload	5Pn/5s	$\pm 0.5\%$ max. $+ 0.05\Omega$
Climatic Sequence	$- 55^{\circ}\text{C}$ $+ 200^{\circ}\text{C}$ 5 cycles	$\pm 1\%$ max. $+ 0.05\Omega$
Load Life	Nominal power Pn 1000h at 25°C	$\pm 1\%$ max. $+ 0.05\Omega$

POWER RATING CHART



TEMPERATURE RISE



MARKING

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

ORDERING INFORMATION			
SH	25	10k Ω	$\pm 5\%$
MODEL	STYLE	OHMIC VALUE	TOLERANCE