

## Cemented Wirewound Resistors



### FEATURES

- 3 W and 4 W at + 40 °C
- Cemented protection
- Non flammability
- Industrial applications
- Low values available: 20 mΩ available (for SG3)  
100 mΩ available (for SG4)
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

DIMENSIONS in millimeters (max.)			
	MODEL	Ø A	L
	SG3	5 (5.2 for ≤ 0.2 Ω)	13
	MODEL	Ø A	L
	SG4	5.5 (5.8 for ≤ 0.5 Ω)	15.8

STANDARD ELECTRICAL SPECIFICATIONS				
MODEL	RESISTANCE RANGE Ω	RATED POWER $P_{40\text{ °C}}$ W	LIMITING ELEMENT VOLTAGE V	TOLERANCE ± %
SG3	0.02 to 3.3K	3	100	5
SG4	0.02 to 3.9K	4	125	5

MECHANICAL SPECIFICATIONS	
Mechanical Protection	Cement
Resistive Element	Ni Cr wire
Connections	Copper tinned

TECHNICAL SPECIFICATIONS		
	SG3	SG4
Critical Resistance	3.3 kΩ	3.9 kΩ
Temperature Coefficient (typical)	$V\Omega < 0.1 \Omega$ 300 ppm/°C	
Temperature Coefficient (typical)	$V\Omega \geq 0.1 \Omega$ 150 ppm/°C	

ENVIRONMENTAL SPECIFICATIONS	
Temperature Range	- 55 °C to + 250 °C
Climatic Category	55/250/21

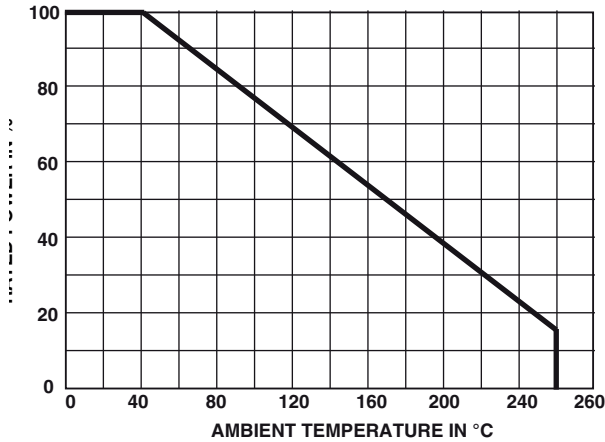
PERFORMANCE		
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS
Short Time Overload	$5 P_n$ during 5 s	± (1.5 % + 0.005 Ω)
Rapid Change of Temperature	EN1400 CEI-115-1, - 55 °C + 200 °C 5 cycles	± (1 % + 0.005 Ω)
Humidity	EN60115-1, 56 days 93 % RH	± (1 % + 0.005 Ω)
Load Life	MIL-STD 202, method 108 $P_r$ 1000h	± (5 % + 0.005 Ω)
Moisture Resistance	MIL-STD 202 method 106	± (1 % + 0.005 Ω)
Vibration	MIL-STD 202 method 204, Test 20 g, 10 Hz/2000 Hz	± (0.5 % + 0.005 Ω)
Shock	MIL-STD 202 method 213, Test C	± (0.5 % + 0.005 Ω)



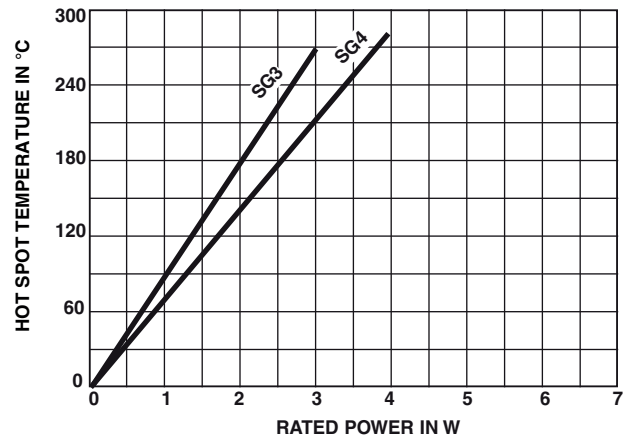
**SPECIAL FEATURES**

Please consult Vishay Sfernice for other ohmic values and tolerances.

**POWER RATING**



**TEMPERATURE RISE**



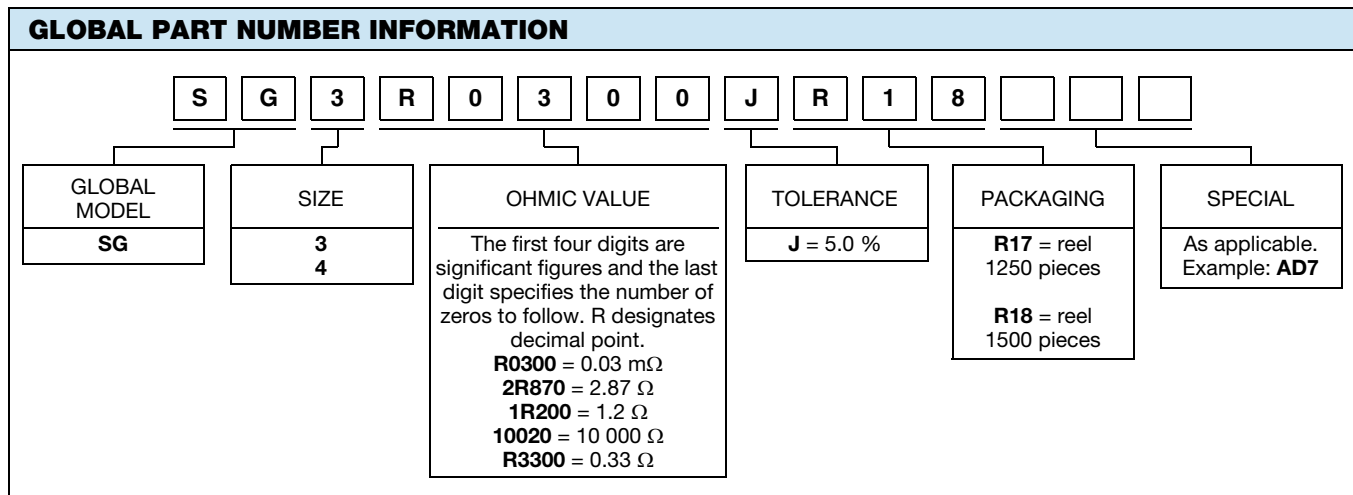
**MARKING**

GEKA trademark, model, style, nominal resistance (in Ω), tolerance (in %).

Note: For low ohmic values, (< 0.1 Ω), quality of marking cannot be guaranteed.

PACKAGING	
Tape and reel packaging by:	
- 1500 pieces SG3	
- 1250 pieces SG4	

ORDERING INFORMATION						
SG	3	330 Ω	± 5 %	± 150 ppm/°C	TR1500	e3
MODEL	STYLE	OHMIC VALUE	TOLERANCE	TEMPERATURE COEFFICIENT	PACKAGING	LEAD (Pb)-FREE
	3			± 300 ppm/°C		
	4					





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