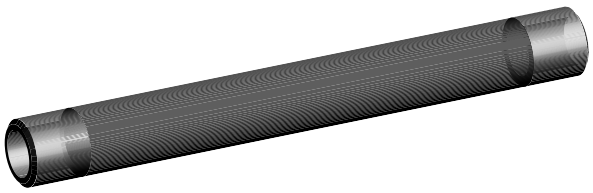
Carbon Film Resistors, Special Purpose, High Frequency Load (Tubes)



FEATURES

- High stability and excellent high frequency characteristics
- Particularly suited for high frequency applications involving high power, high accuracy RF measurements
- Carbon film construction
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

APPLICATIONS

High frequency wattmeters for output measurement in radio, TV and radar transmitters, dielectric heating and similar RF generating equipment. Ideal for use as non-reactive radio frequency terminations. Special high power designs with internal water cooling are available. Contact factory.

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING (WATTAGE FREE AIR) $P_{25\,°C}$ W	RESISTANCE RANGE Ω		TOLERANCE ± %	TEMPERATURE COEFFICIENT ± ppm/°C	LINEARITY TOLERANCE ± %
SPW236	SPW-236	120	50 (standard)	Other values available on special order.	2, 5	200 (average) 250 (maximum)	10
SPW227	SPW-227	55			2, 5		10
SPW210	SPW-210	40			2, 5		10
SPW214	SPW-214	10			2, 5		10
SPW212	SPW-212	2			2, 5		10

COOLING

Approximate increase in wattage when forced air cooling is employed is 3 times wattages shown and for liquid cooling (with heat exchanger) is 60 times wattages shown. The limiting factor insofar as the resistor is concerned is the film temperature. This should not exceed + 200 °C and for maximum stability should not exceed + 150 °C.

MECHANICAL SPECIFICATIONS

Identification	Type designation resistance value, tolerance and code date of manufacture are printed on each unit.
Terminations	All types electroplated copper except SPW-212. The SPW-212 has silver coated termination bands.

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: SPW21050R00JSL (preferred part numbering format)

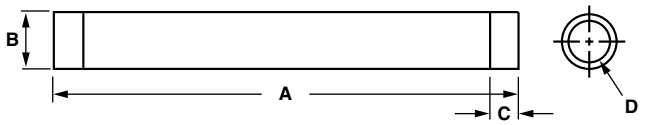
S	P	W	2	1	0	5	0	R	0	0	J	S	L			

GLOBAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING	SPECIAL
(see Standard Electrical Specification table)	**R** = Ω **25R00** = 25 Ω **600R0** = 600 Ω	**G** = ± 2 % **J** = ± 5 % **K** = ± 10 %	**SL** = Custom package	Blank = Standard (Dash Number) (up to 3 digits) From **1 to 999** as applicable

Historical Part Number: SPW-210 50 5 % (will continue to be accepted)

SPW-210	50	5 %	S51
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

DIMENSIONS in inches (millimeters)



GLOBAL MODEL	A	B	C (O.D.) (2)	D (I.D.)
SPW236	18.0 ± 0.062 (457.20 ± 1.57)	1.75 ± 0.025 (44.45 ± 0.64)	1.0 ± 0.063 (25.40 ± 1.60)	1.25 ± 0.025 (31.75 ± 0.64)
SPW227	12.0 ± 0.062 (304.80 ± 1.57)	1.125 ± 0.025 (28.58 ± 0.64)	0.500 ± 0.032 (12.70 ± 0.81)	0.875 ± 0.020 (22.23 ± 0.51)
SPW210	12.0 ± 0.062 (304.80 ± 1.57)	0.875 ± 0.010 (22.23 ± 0.25)	0.625 ± 0.032 (15.88 ± 0.81)	0.625 ± 0.020 (15.88 ± 0.51)
SPW214	5.0 ± 0.032 (127.0 ± 0.81)	0.562 ± 0.006 (14.27 ± 0.15)	0.500 ± 0.032 (12.70 ± 0.81)	0.375 ± 0.013 (9.53 ± 0.33)
SPW212 (1)	2.0 ± 0.062 (50.80 ± 1.57)	0.250 ± 0.006 (6.35 ± 0.15)	0.250 ± 0.032 (6.35 ± 0.81)	Solid rod

Notes

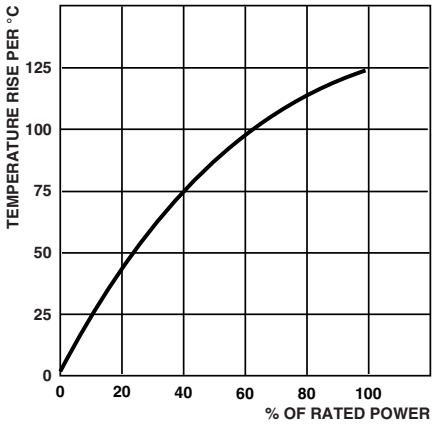
- Wattage ratings do not allow for mounting hardware.

(1) Representative types only. Consult factory for special requirements.

(2) C dimension may be varied on special order.

LOAD TEMPERATURE RISE

(Operation in Free Air)



MARKING

- Dale
- Model
- Value
- Tolerance
- Date code

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