S & SL Surface Mount Power Resistors



The SL Series uses a metal strip resistance element with very low inductance and thermal emf offering very low resistances from R005 to R07. The S Series uses a welded, wirewound element for higher resistance applications to 50K.

- High Power 0.5 to 4 watts
- Available in non inductive winding (Type SN)
- Low temperature coefficient
- Superior surge handling capability
- RoHS Compliant



Characteristics

Tolerance: Also available 1% (F), 5% (J)

Up to 1R $\pm 0.5\%$ (D), from 1R to 10R to $\pm 0.2\%$ (C), 10R and above $\pm 0.1\%$ (B)

Temperature Coefficient: Type S: 1R to 10R, ±50ppm/°C, <1R ±90ppm°C, >10R ±20ppm°C. Type SL: ±120ppm/°C

Dielectric Strength: Type S: 1000VAC. Type SL: 500VAC

Operating Temperature: -55°C to 275°C

Insulation Resistance: 1000 Megohms miniumum, dry

Non Inductive Winding: Divide maximum resistance by two, multiply working voltage by 0.707 **Environmental Specifications**

Load Life at Rated Wattage: 1%, Moisture Resistance: 1%, Temperature Cycle (-55°C to 275°C): 0.5%, (MIL-STD 202):

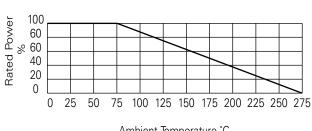
Short Term Overload (5x rated power for 5 sec.): 0.5%, Low Temperature Storage: 0.5%,

Solder Heat: 0.25%, Shock: 0.5%, Vibration: 0.5%

Electrical Specifications

Туре	Wattage	Resistance Range	Reel / Tape Width		
S05	0.5	R01 - 400R	12		
S1	1	R005 - 3K	16		
S2	2	R01 - 15K	24 32		
S3	3	R01 - 25K			
S4	4	R01 - 50K	32		
SL -1	1	R005 - R05	16		
SL - 2	2	R005 - R07	24		

Derating Curve



Ambient Temperature °C

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It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask Arcol.

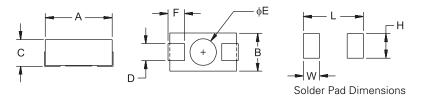
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Dimensions ±0.4 UOS (mm)

Туре	А	В	С	D	Lead Thickness ± 0.05	V Max	E ± 0.4 x ±0.13	F	W	Н	L
S05	4.8	3.3	2.8	1.5	0.152	33	2.54 x 0.127	1.01	1.57	2.54	6.35
S1	6.6	3.9	3.2	1.8	0.152	58	3.04 × 0.127	1.77	2.43	2.84	8.55
S2	11.4	6.4	4.6	3.04	0.152	127	4.82 x 0.127	2.54	3.93	5.84	13.7
S3	15.9	6.8	6.3	3.04	0.152	150	3.81 x 0.127	3.42	5.08	3.81	17.78
S4	20.8	7.5	7.1	3.8	0.152	212	6.22 x 0.127	4.82	5.58	6.35	22.86
SL - 1	6.6	3.9	2.5	1.8	0.152	0.31	3.04 x 0.127	1.77	2.43	2.84	8.55
SL - 2	11.4	6.3	2.5	3.04	0.152	0.45	4.82 x 0.127	2.54	3.93	5.84	13.71



Ordering Procedure

Standard Resistor. To specify: Type, Ohmic Value, Tolerance

e.g.: S4 10K B

Non Inductive Resistor. To specify add N

e.g.: SN-2 1K B

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