

1/2 Watt to 5 Watt

SWM Series

Jaro Series SWM wirewound resistors are designed for applications that are too demanding for conventional chip resistors. Advantages include superior surge capability, improved temperature stability, negligible noise, and exceptional environmental performance. The all-welded internal construction combined with highest grade materials ensures utmost reliability.



FEATURES

Widest selection in the industry!

Resistance range: 0.005W to 100KW

Excellent T.C. stability (available to $\pm 5\text{ppm}/^\circ\text{C}$)

Standard tolerance: $\pm 1\%$ or $\pm 5\%$ (available to 0.01%)

Inherent wirewound performance

Quick delivery available

OPTIONS

Option 'X': Non-inductive (0.2mH Max $\leq 50\text{W}$, 0.37mH $> 50\text{W}$)

Option 'T': PTC Temp. Sensitive (+80 to +6000ppm/ $^\circ\text{C}$)

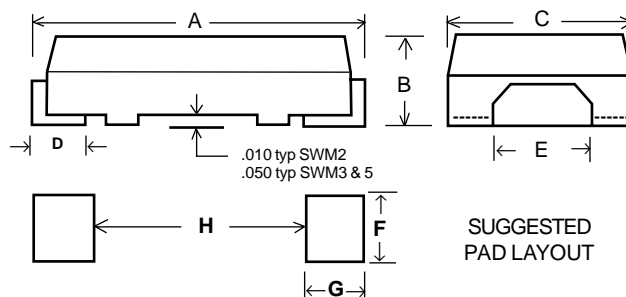
Option 'P': Increased Pulse Capability

Option 'FF': Flameproof Fusible

Option 'F': Flameproof (UL94V-0)

Option 'ER': 100 Hour Burn-In

Numerous design modifications are available (special marking, matched sets, etc). Consult factory for application assistance.



SUGGESTED
PAD LAYOUT

TYPICAL PERFORMANCE CHARACTERISTICS

Load Life (1000 hours)	$\pm 0.5\%$	
Moisture Resistance	$\pm 0.2\%$	
Temperature Cycling	$\pm 0.2\%$	
Short Time Overload	$\pm 0.2\%$	
Resistance to Solder Heat (260 $^\circ\text{C}$, 5 sec)	$\pm 0.1\%$	
Temperature Coefficient	Maximum	Optional
R005-R009	600ppm	200, 300
R010-R049	300ppm	100, 200
R050-R099	200ppm	50, 100
R100-R990	90ppm	20,30,50
1R00-9R90	50ppm	10,20,30
10R0 and above	20ppm	5, 10
Dielectric Strength	500V Min. (1KV avail.)	
Solderability (within .032" from PCB surface)	95% coverage	
Operating Temperature Range	-55 $^\circ\text{C}$ to +175 $^\circ\text{C}$	

SPECIFICATIONS

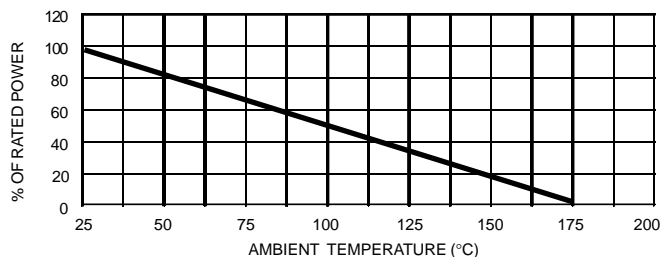
Jaro Type	Wattage @ 25°C	Voltage Rating**	Resistance Range	DIMENSIONS Inch [mm]							
				A	B	C	D	E	F	G	H
SWM1/2*	0.5W	30V	0.01Ω - 2K	.200±.02 [5.1±.5]	.096±.015 [2.44±.38]	.120±.01 [3.18±.25]	.025 Min. [.63]	.045±.015 [1.14±.38]	.080 [2.0]	.100 [2.5]	.100 [2.5]
SWM1	1W	40V	0.005Ω - 10K	.260±.02 [6.6±.5]	.110±.015 [2.79±.38]	.150±.015 [3.81±.38]	.032 Min. [0.8]	.060±.015 [1.5±.38]	.090 [2.3]	.125 [3.2]	.150 [3.8]
SWM2	2W	80V	0.005Ω - 25K	.445±.032 [11.3±.81]	.180±.02 [4.57±.5]	.225±.015 [5.71±.38]	.060 Min. [1.50]	.080±.015 [2.0±.38]	.120 [3.0]	.200 [5.0]	.200 [5.0]
SWM3	3W	140V	0.005Ω - 50K	.811±.018 [20.6±.46]	.275±.015 [6.99±.38]	.273±.015 [6.93±.38]	.085±.02 [2.16±.5]	.110±.02 [2.79±.5]	.200 [5.0]	.200 [5.0]	.600 [15.2]
SWM5	5W	210V	0.005Ω - 100K	.811±.018 [20.6±.46]	.275±.015 [6.99±.38]	.273±.015 [6.93±.38]	.085±.02 [2.16±.5]	.110±.02 [2.79±.5]	.200 [5.0]	.250 [6.4]	.600 [15.2]

* Info on SWM1/2 is preliminary. Consult factory for availability.

** Voltage determined by $E = \sqrt{PR}$, E not to exceed maximum voltage rating. Increased ratings available. Multiply by 0.7 for Opt. 'X'

DERATING CURVE

Resistors may be operated up to full rated power with consideration of mounting density, pad geometry, PCB material, and ambient temperature.



P/N DESIGNATION

SWM2
Jaro Type

Options: X, T, P, FF, F, ER
(leave blank for standard)

1001
4-Digit Resis.
Code: 3 signif. digits & multiplier
R010=0.01Ω
1R00=1Ω
1000=100Ω
1001=1kΩ

F
Tolerance Code:
K=10%
J=5%
G=2%
F=1%
D=0.5%
C=0.25%
B=0.1%
A=0.05%
Q=0.02%
T=0.01%

T
Packaging:
B=Bulk
T=Tape

Optional Temp. Coefficient—
leave blank for standard
5=5ppm
10=10ppm
100=100ppm
etc.