

# SWT/EWT Series

Non-Flammable Edgewound Tubular Wirewound Resistor

Stackpole Electronics, Inc.

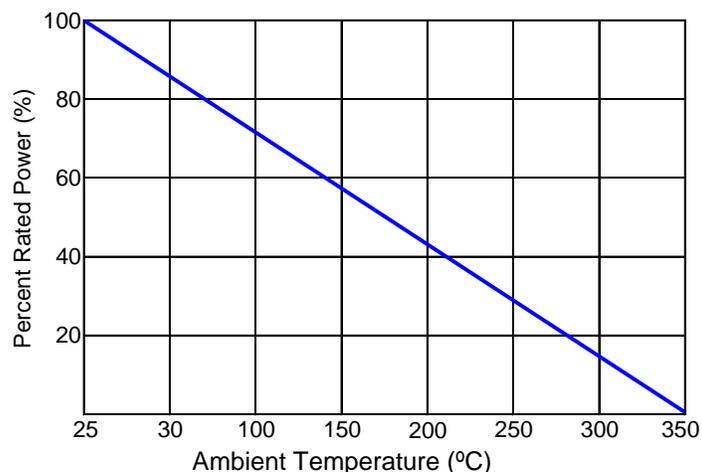
Resistive Product Solutions

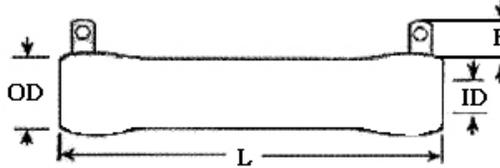
- Features:
- High current capability
  - RoHS compliant / lead-free
  - Non-inductive style only available with silicone coating (NSWT)
  - Suitable for soldering or thru bolt connections
  - Wirewound ribbon on ceramic substrate
  - SWT – Silicone coating provides temperature handling up to 350°C
  - SWTA – Adjustable version
  - EWT – Vitreous enamel coating provides temperature handling up to 500°C



Electrical Specifications					
Type / Code	Power Rating (Watts) @ 70°C	Dielectric Strength VAC	Ohmic Range (Ω) and Tolerance 5%, 10%		
			SWT	NSWT	EWT
SWT12 / EWT12	12W	1,000	0.1 - 51K	0.1 - 53	1 - 5K
SWT25 / EWT25	25W	2,500	0.1 - 30K	0.1 - 100	1 - 10K
SWT50 / EWT50	50W	2,500	0.1 - 50K	0.1 - 275	1 - 20K
SWT100 / EWT100	100W	2,500	0.1 - 100K	0.12 - 680	1 - 50K
SWT150 / EWT150	150W	2,500	0.1 - 150K	0.22 - 1.5K	1 - 80K
SWT175 / EWT175	175W	2,500	0.15 - 100K	0.24 - 1.3K	1 - 100K
SWT200 / EWT200	200W	2,500	0.1 - 200K	0.25 - 1.35K	1 - 120K
SWT225 / EWT225	225W	2,500	0.2 - 130K	0.3 - 1.7K	1 - 130K
SWT250 / EWT250	250W	2,500	0.5 - 125K	0.33 - 1.8K	1 - 200K
SWT300 / EWT300	300W	2,500	0.5 - 150K	0.42 - 2.25K	1 - 240K
SWT400 / EWT400	400W	2,500	0.5 - 200K	0.54 - 3K	1 - 300K
SWT500 / EWT500	500W	2,500	0.5 - 250K	0.77 - 4.2K	1 - 400K
SWT700 / EWT700	700W	2,500	1 - 350K	1 - 5.3K	1 - 500K
SWT1000 / EWT1000	1000W	2,500	1 - 500K	1.4 - 7.6K	1 - 750K
SWT1300 / EWT1300	1300W	2,500	1 - 600K	2 - 10K	1 - 1M

Power Derating Curve:

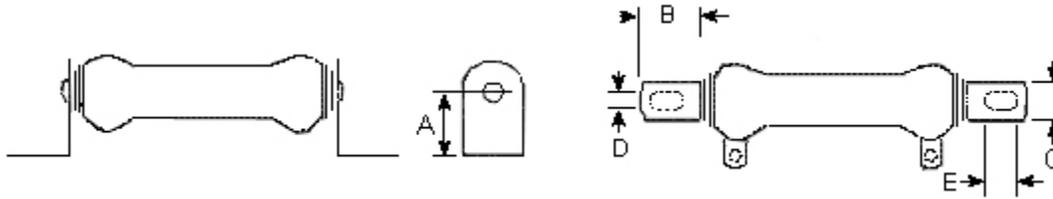




Mechanical Specifications					
Type / Code(1)	OD	ID	F	L	Unit
SWT12 / EWT12	0.313 ± 0.039	0.187 ± 0.039	0.472 ± 0.039	1.752 ± 0.079	inches
	7.94 ± 1.00	4.76 ± 1.00	12.00 ± 1.00	44.50 ± 2.00	mm
SWT25 / EWT25	0.563 ± 0.039	0.313 ± 0.039	0.472 ± 0.039	2.008 ± 0.079	inches
	14.30 ± 1.00	7.94 ± 1.00	12.00 ± 1.00	51.00 ± 2.00	mm
SWT50 / EWT50	0.563 ± 0.039	0.313 ± 0.039	0.748 ± 0.039	4.016 ± 0.079	inches
	14.30 ± 1.00	7.94 ± 1.00	19.00 ± 1.00	102.00 ± 2.00	mm
SWT100 / EWT100	0.752 ± 0.039	0.500 ± 0.039	0.669 ± 0.039	6.496 ± 0.079	inches
	19.10 ± 1.00	12.70 ± 1.00	17.00 ± 1.00	165.00 ± 2.00	mm
SWT150 / EWT150	1.102 ± 0.039	0.752 ± 0.039	0.669 ± 0.039	8.110 ± 0.079	inches
	28.00 ± 1.00	19.10 ± 1.00	17.00 ± 1.00	206.00 ± 2.00	mm
SWT175 / EWT175	1.126 ± 0.039	0.752 ± 0.039	0.669 ± 0.039	8.504 ± 0.079	inches
	28.60 ± 1.00	19.10 ± 1.00	17.00 ± 1.00	216.00 ± 2.00	mm
SWT200 / EWT200	1.378 ± 0.039	0.752 ± 0.039	0.669 ± 0.039	8.740 ± 0.079	inches
	35.00 ± 1.00	19.10 ± 1.00	17.00 ± 1.00	222.00 ± 2.00	mm
SWT225 / EWT225	1.126 ± 0.039	0.752 ± 0.039	0.709 ± 0.039	10.512 ± 0.079	inches
	28.60 ± 1.00	19.10 ± 1.00	18.00 ± 1.00	267.00 ± 2.00	mm
SWT250 / EWT250	1.575 ± 0.039	0.984 ± 0.039	0.787 ± 0.039	8.268 ± 0.079	inches
	40.00 ± 1.00	25.00 ± 1.00	20.00 ± 1.00	210.00 ± 2.00	mm
SWT300 / EWT300	1.575 ± 0.039	0.984 ± 0.039	0.787 ± 0.039	10.236 ± 0.079	inches
	40.00 ± 1.00	25.00 ± 1.00	20.00 ± 1.00	260.00 ± 2.00	mm
SWT400 / EWT400	1.575 ± 0.039	0.984 ± 0.039	0.787 ± 0.039	12.992 ± 0.079	inches
	40.00 ± 1.00	25.00 ± 1.00	20.00 ± 1.00	330.00 ± 2.00	mm
SWT500 / EWT500	1.969 ± 0.039	1.378 ± 0.039	0.984 ± 0.039	12.992 ± 0.079	inches
	50.00 ± 1.00	35.00 ± 1.00	25.00 ± 1.00	330.00 ± 2.00	mm
SWT700 / EWT700	1.969 ± 0.039	1.378 ± 0.039	0.984 ± 0.039	18.110 ± 0.079	inches
	50.00 ± 1.00	35.00 ± 1.00	25.00 ± 1.00	460.00 ± 2.00	mm
SWT1000 / EWT1000	2.362 ± 0.039	1.575 ± 0.039	1.181 ± 0.039	21.260 ± 0.079	inches
	60.00 ± 1.00	40.00 ± 1.00	30.00 ± 1.00	540.00 ± 2.00	mm
SWT1300 / EWT1300	2.559 ± 0.039	1.654 ± 0.039	1.181 ± 0.039	25.591 ± 0.079	inches
	65.00 ± 1.00	42.00 ± 1.00	30.00 ± 1.00	650.00 ± 2.00	mm

(1) EWT and NSWT series will have the same Mechanical Specifications as SWT series

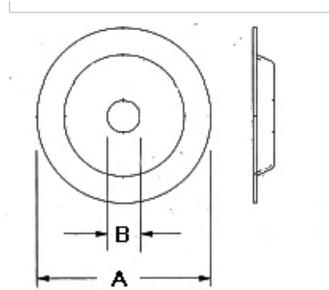
- Hardware:
- Sturdy plated steel brackets, thru-bolts, centering washers, and insulating washers
  - Brackets provide elongated mounting holes for ease of mounting



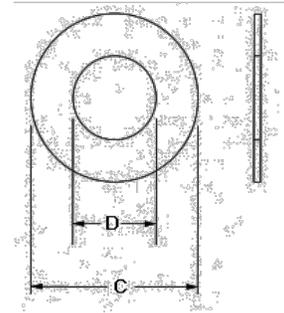
Mounting Brackets Mechanical Specifications

Resistor Power Rating	A	B	C	D	E	Unit
12W	1.000	0.750	0.500	0.219	0.438	inches
	25.40	19.05	12.70	5.56	11.13	mm
25W	1.000	0.750	0.500	0.219	0.438	inches
	25.40	19.05	12.70	5.56	11.13	mm
50W	1.000	0.750	0.500	0.219	0.438	inches
	25.40	19.05	12.70	5.56	11.13	mm
100W	1.000	0.750	0.500	0.219	0.438	inches
	25.40	19.05	12.70	5.56	11.13	mm
150W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
175W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
200W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
225W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
250W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
300W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
400W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
500W	3.000	1.500	2.500	0.406	-	inches
	76.20	38.10	63.50	10.3	-	mm
700W	1.500	0.875	1.250	0.281	0.563	inches
	38.10	22.23	31.75	7.14	14.3	mm
1000W	3.000	1.500	2.500	0.406	-	inches
	76.20	38.10	63.50	10.3	-	mm
1300W	3.000	1.500	2.500	0.406	-	inches
	76.20	38.10	63.50	10.3	-	mm

Metal Centering Washer



Mica Insulating Washer



**Bolt and Washers Mechanical Specifications**

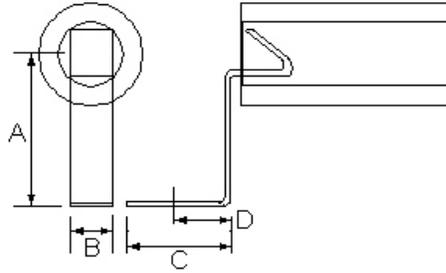
Resistor Power Rating	OD	Core Length	Bolt Length	Bolt No.	A	B	C	D	Unit
12W	0.313 7.95	1.748 44.40	2.250 57.15	8	0.313 7.95	- -	- -	- -	inches mm
25W	0.563 14.30	2.008 51.00	2.500 63.50	10	0.560 14.22	0.190 4.83	0.750 19.05	0.313 7.95	inches mm
50W	0.563 14.30	4.016 102.00	4.750 120.65	10	0.560 14.22	0.190 4.83	0.750 19.05	0.313 7.95	inches mm
100W	0.752 19.10	6.496 165.00	7.000 177.80	10	0.750 19.05	0.190 4.83	1.000 25.40	0.500 12.70	inches mm
150W	1.102 28.00	8.110 206.00	7.750 196.85	0.25"	1.125 28.58	0.250 6.35	1.250 31.75	0.625 15.88	inches mm
175W	1.126 28.60	8.504 216.00	9.125 231.78	0.25"	1.125 28.58	0.250 6.35	1.500 38.10	0.750 19.05	inches mm
200W	1.378 35.00	8.740 222.00	9.250 234.95	0.25"	1.400 35.56	0.250 6.35	1.500 38.10	0.750 19.05	inches mm
225W	1.126 28.60	10.512 267.00	11.250 285.75	0.25"	1.125 28.58	0.250 6.35	1.500 38.10	0.750 19.05	inches mm
250W	1.575 40.00	8.740 222.00	9.250 234.95	0.5"	1.570 39.88	0.500 12.70	2.000 50.80	1.000 25.40	inches mm
300W	1.575 40.00	10.709 272.00	11.125 282.58	0.5"	1.570 39.88	0.500 12.70	2.000 50.80	1.000 25.40	inches mm
400W	1.575 40.00	13.465 342.00	14.000 355.60	0.5"	1.570 39.88	0.500 12.70	2.000 50.80	1.000 25.40	inches mm
500W	2.500 63.50	12.008 305.00	12.500 317.50	0.5"	2.500 63.50	0.500 12.70	3.000 76.20	1.500 38.10	inches mm
700W	1.969 50.00	18.189 462.00	18.750 476.25	0.5"	1.970 50.04	0.500 12.70	2.250 57.15	1.250 31.75	inches mm
1000W	2.500 63.50	20.000 508.00	20.500 520.70	0.5"	2.500 63.50	0.500 12.70	3.000 76.20	1.500 38.10	inches mm
1300W	2.559 65.00	26.260 667.00	27.000 685.80	0.5"	2.560 65.02	0.500 12.70	3.000 76.20	1.500 38.10	inches mm

# SWT/EWT Series

Non-Flammable Edgewound Tubular Wirewound Resistor

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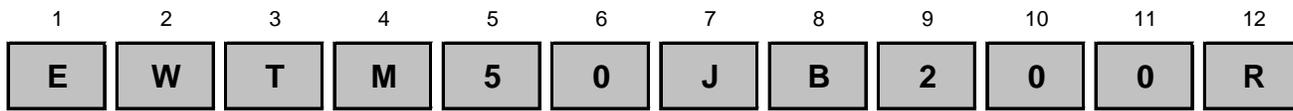
Resistive Product Solutions



## Spring Clip Mechanical Specifications

Resistor Power Rating	A	B	C	D	Unit
12W	0.281	0.250	0.344	0.188	inches
	7.14	6.35	8.74	4.78	mm
25W	0.625	0.250	0.469	0.313	inches
	15.88	6.35	11.91	7.95	mm
50W	0.625	0.250	0.469	0.313	inches
	15.88	6.35	11.91	7.95	mm

**How to Order**



Product Series		Code	Description	Code	Power	Tolerance		Packaging				Resistance Value
SWT	Silicone Coating (std)	-	Std Tab Connection	12	12W	Code	Tol	Code	Description	Size	Quantity	Four characters with the multiplier used as the decimal holder.  0.1 ohm = R100 1 ohm = 1R00 10 Kohm = 10K0
EWT	Vitreous Enamel	M	Mounting Hardware	25	25W	J	5%	B	Bulk	All Sizes	Each	
NSWT	Non-inductive Silicone Coating	S	Spring Clips	50	50W	K	10%					
		L	Welded Straight Leads	100	100W							
		A	Adjustable	150	150W							
				175	175W							
				200	200W							
				225	225W							
				250	250W							
				300	300W							
				400	400W							
				500	500W							
				700	700W							
				1000	1000W							
				1300	1300W							

Legacy Part Number (before January 3, 2011):

SEI Type		Termination		Power Rating	Nominal Resistance	Tolerance	Packaging	
EWT		M		50	200	5%	B	
Type	Description	Code	Description	Code	Tolerance		Code	Description
SWT	Silicone Coating (std)	-	Std Tab Connection	12	5%		B	Bulk
EWT	Vitreous Enamel	M	Mounting Hardware	25	10%			
NSWT	Non-Inductive Silicone Coating	S	Spring Clips	50				
		L	Welded Straight Leads	100				
		A	Adjustable	150				
				175				
				200				
				225				
				250				
		300						
		400						
		500						
		700						
		1000						
		1300						