

### Features

- Frequency Range from DC to 26 GHz
- Power Handling up to 1000 Watts
- BeO, ALN, Alumina or CVD Diamond Substrates
- Telecom Tuned Circuit Designs Available
- Tin/Lead, Lead Free, or Solder Fused Plated
- Tape and Reel Packaging Available
- High Reliability Versions Available
- Tab & Cover, Flange-Mounted, Threaded, Stripline Flange, Pill, Coaxial Remote (CRT), Surface Mount and Wire-Bondable
- S-Parameter Data Available

### Applications

- Broadcast (TV and Radio)
- High Power Amplifier
- High Power Filters
- Instrumentation
- Isolators
- Military
- Remote Termination
- Satellite Communication
- Splitters / Combiners

For our CVD Diamond Terminations see **Diamond Rf Resistives®** on pages 65 to 74



We offer a full line of high power RF terminations including styles such as: chip, tab & cover, flange-mounted coaxial, SMA, stripline flange, surface mount and wire-bondable. Our tuned circuit chip designs deliver the lowest VSWR, while extending frequency ranges for broadband applications. Some devices are capable of handling power up to 1KW and frequencies up to 26.5 GHz. Our products are offered in different substrates such as: Alumina, BeO, AlN and CVD diamond.

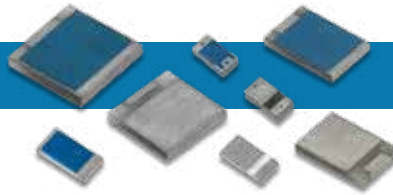
### Quick Selector Chart

Style	Frequency (GHz)	Power (Watts)	Page
Chip SMT Series	DC - 4	10 - 150	38-39
Chip CT Series	DC - 26.5	2 - 250	40-41
Tab & Cover 82 Series	DC - 18	10 - 500	42-43
Flange 32 Series	DC - 18	10 - 1000	44-49
Flange 5 Series	DC - 2	10 - 250	44-49
Stripline Flange 8 Series	DC - 26.6	1 - 75	50-52
Coaxial (Soldered) 12 Series	DC - 26.6	0.5	53-54
Coaxial (Solderless) 41 Series	DC - 18	2	53-54

\*Maximum Power

# SMT Series

## Surface Mount Terminations

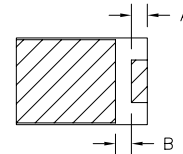
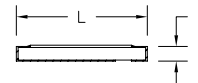
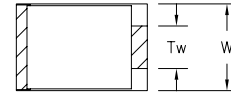


We offer a wide selection of SMT chip terminations handling input power levels up to 250W and covering frequency ranges up to 4 GHz. Using EMC's patented asymmetrical wrap geometry, the thermal dissipation of the surface mount termination is improved by increasing the solderable grounding area. This eliminates the need for bolt down heat sinks and tabs, thereby reducing assembly costs.

### Specifications

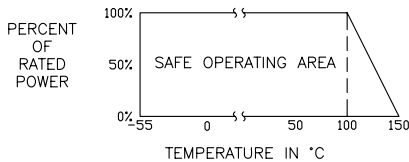
Impedance	50 Ohms
Frequency Range	DC to 4 GHz
Power Rating	100% @ 100 °C
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C
Resistive Material	Thick Film
Terminal Material	Thick Film, Nickel Barrier, Solder or no lead Silver Plated Finish

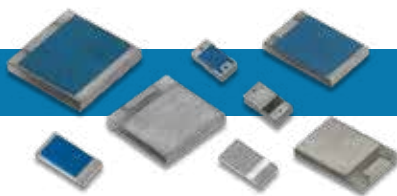
### SMT



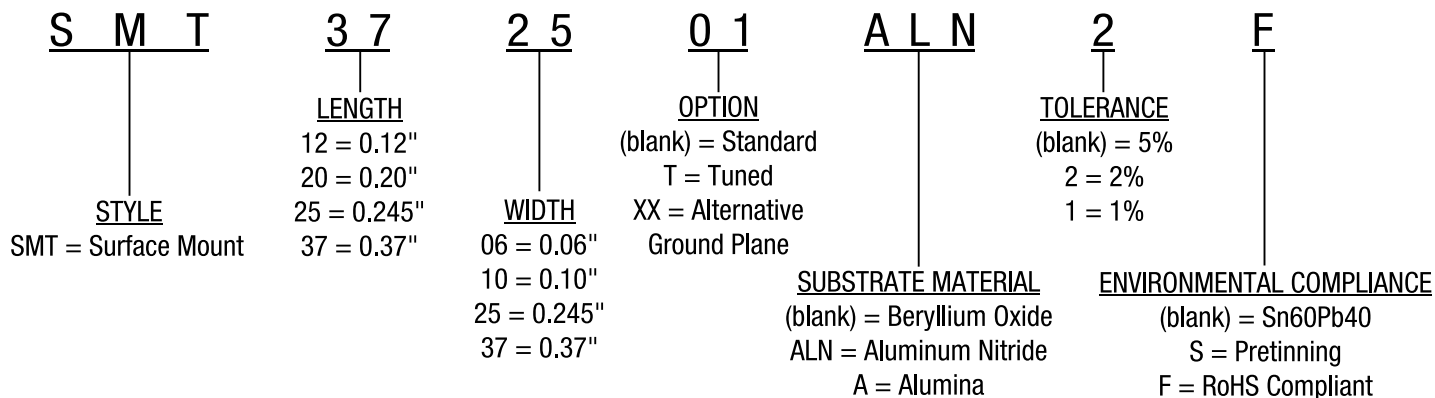
For A, B and Tw dimensions see data sheet on website.

### Power Rating and Derating





### Part Numbering Code



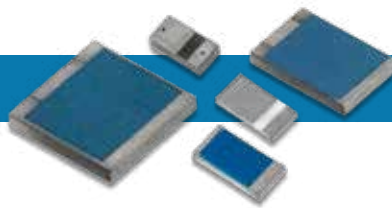
Power Watt	Frequency GHz	VSWR Max:1	Substrate	L		W		T		Part Series #
					mm [inches]		mm [inches]		mm [inches]	
10	2.0	1.25	AlN	3.04	[0.120]	1.52	[0.060]	0.68	[0.027]	SMT1206 *ALN
10	3.0	1.25	Alumina	5.08	[0.200]	2.54	[0.100]	0.64	[0.025]	SMT2010*A
15	3.0	1.25	Alumina	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	SMT2525*A
20	4.0	1.20	AlN	5.08	[0.200]	2.54	[0.100]	0.64	[0.025]	SMT2010TALN
20	2.0	1.25	AlN	5.08	[0.200]	2.54	[0.100]	1.04	[0.041]	SMT2010*ALN
20	3.0	1.25	Alumina	9.40	[0.370]	6.35	[0.250]	0.64	[0.025]	SMT3725*A
25	3.0	1.25	Alumina	9.53	[0.375]	9.52	[0.375]	0.64	[0.025]	SMT3737*A
30	2.0	1.25	BeO	5.08	[0.200]	2.54	[0.100]	1.04	[0.041]	SMT2010
60	2.0	1.25	AlN	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	SMT2525*ALN
60	2.7	1.15	AlN	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	SMT2525TALNF
75	2.0	1.25	BeO	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	SMT2525
80	2.7	1.15	AlN	9.53	[0.375]	6.35	[0.250]	1.04	[0.041]	SMT3725TALN
80	2.0	1.25	AlN	9.53	[0.375]	6.35	[0.250]	1.04	[0.041]	SMT3725*ALN
100	2.7	1.15	AlN	9.40	[0.372]	9.40	[0.372]	1.30	[0.051]	SMT3737TALN
100	2.0	1.25	AlN	9.40	[0.372]	9.40	[0.372]	1.30	[0.051]	SMT3737*ALN
125	2.0	1.25	BeO	9.53	[0.375]	6.35	[0.250]	1.04	[0.041]	SMT3725
150	2.0	1.25	BeO	9.40	[0.372]	9.40	[0.372]	1.30	[0.051]	SMT3737
150	4.0	1.20	AlN	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	SMT252503ALN2F
200	2.7	1.20	AlN	9.40	[0.370]	6.22	[0.245]	1.04	[0.041]	SMT372503ALN2F

"F" suffix (RoHS) is not available with Pretinning ("S" suffix)

\*\*\* Is a place holder. See part number configurations to complete the part number

# CT High Power Series

## Chip Termination

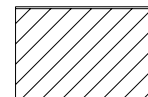
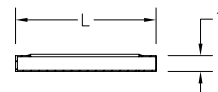
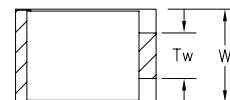


Our high power chip terminations are available in both thick film and thin film resistor designs, offering you flexibility needed to match the correct part more closely to your specific application. Many designs have been optimized for RF performance and so will minimize the variability of capacitive reactance. Localized hot spots associated with trimming have been virtually eliminated. Reduced variation means your circuit performs so consistently that in most cases no external tuning is required.

### Specifications

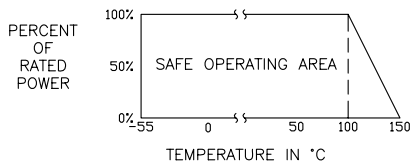
Impedance	50 Ohms
Frequency Range	DC to 26.5 GHz
Power Rating	100% @ 100°C
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C
Resistive Material	Thick Film
Terminal Material	Thick Film, Nickel Barrier, Solder, Silver (RoHS) or Gold

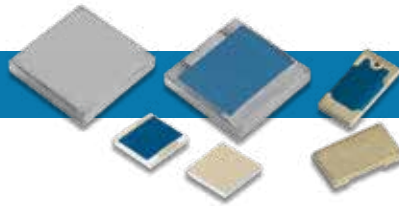
### CT



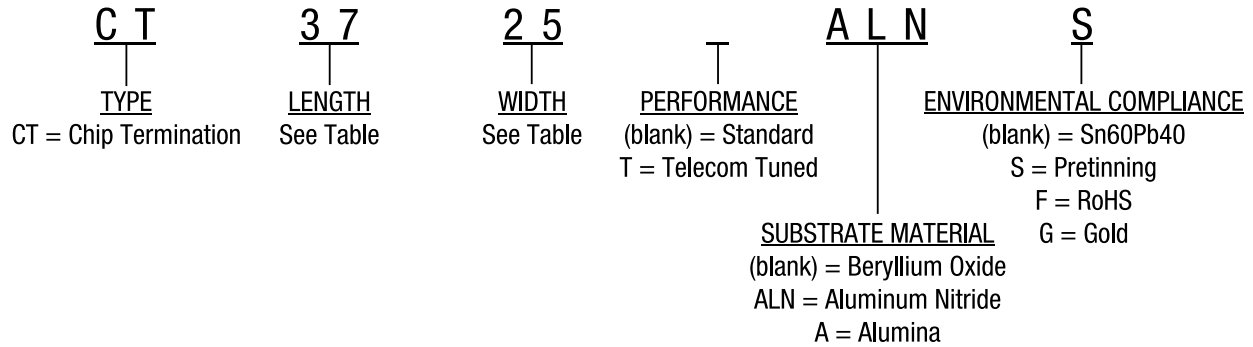
For Tw dimensions see data sheet on website.

### Power Rating and Derating





### Part Numbering Code



*Note: Not every combination of size is available.  
Other ohms values available upon request. Please contact our Sales department.  
"F" and "G" suffixes not available with pretinning ("S" suffix).*

Power Watt	Frequency GHz	VSWR Max:1	Substrate	L		W		T		Part Series #
					mm [inches]		mm [inches]		mm [inches]	
1	26.50	1.35	BeO	1.02	[0.040]	0.51	[0.020]	0.28	[0.011]	CT0402
2	2.50	1.25	Alumina	2.54	[0.100]	1.27	[0.050]	.028	[0.011]	CT1005*A
5	2.00	1.25	Alumina	5.08	[0.200]	2.54	[0.100]	1.04	[0.041]	CT2010*A
10	4.00	1.25	BeO	1.27	[0.050]	1.27	[0.050]	0.28	[0.011]	CT0505
10	2.00	1.25	BeO	3.05	[0.120]	1.53	[0.060]	0.64	[0.025]	CT1206
15	4.00	1.25	BeO	2.54	[0.100]	1.27	[0.050]	0.28	[0.011]	CT1005
15	4.00	1.10	AlN	2.54	[0.100]	1.27	[0.050]	0.28	[0.011]	CT1005TALN
15	4.00	1.25	AlN	3.05	[0.120]	1.53	[0.060]	0.64	[0.025]	CT1206*ALN
20	4.00	1.25	BeO	5.08	[0.200]	2.54	[0.100]	1.04	[0.041]	CT2010
20	4.00	1.25	AlN	5.08	[0.200]	2.54	[0.100]	1.04	[0.041]	CT2010*ALN
20	2.00	1.25	Alumina	4.57	[0.180]	8.89	[0.350]	0.64	[0.025]	CT1835*A
30	4.00	1.25	AlN	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	CT2525*ALN
50	4.00	1.25	BeO	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	CT2525
80	4.00	1.25	AlN	5.82	[0.230]	8.89	[0.350]	1.04	[0.041]	CT2335*ALN
90	2.00	1.30	Alumina	5.82	[0.230]	8.89	[0.350]	0.38	[0.015]	CT2335*A
100	4.00	1.25	BeO	5.82	[0.230]	8.89	[0.350]	1.04	[0.041]	CT2335
100	2.50	1.30	AlN	6.35	[0.250]	6.35	[0.250]	1.04	[0.041]	CT2525TALN
120	3.00	1.10	AlN	5.82	[0.230]	8.89	[0.350]	1.04	[0.041]	CT2335TALN
150	2.00	1.25	AlN	9.40	[0.370]	6.35	[0.250]	1.04	[0.041]	CT3725*ALN
150	2.00	1.25	BeO	9.40	[0.370]	6.35	[0.250]	1.04	[0.041]	CT3725
150	2.00	1.25	BeO	9.40	[0.370]	6.35	[0.250]	1.04	[0.041]	CT3725F
200	2.00	1.20	AlN	9.53	[0.375]	9.52	[0.375]	1.30	[0.051]	CT3737TALN
250	2.00	1.35	BeO	9.53	[0.375]	9.52	[0.375]	1.30	[0.051]	CT3737

Power ratings are based on 100°C heat sink, except for CT2335A, which is 85°C

"\*" is a place holder. See part number configurations to complete the part number

## 82 Series

### Tab & Cover



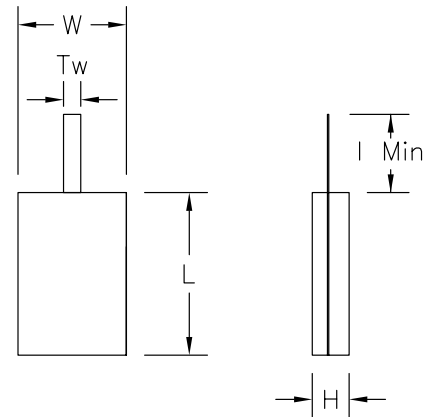
Tab and cover terminations are flangeless devices with protective ceramic covers and tab contacts, offering the highest performance available of any style of component. They are designed for direct solder attachment to a heat sink or circuit board (thermal via required) for excellent heat transfer. These devices deliver excellent VSWR over a broad frequency band. The frequency ranges from DC to 18 GHz. The power rating ranges from 10 to 500 watts. Optional lead forming is available on most designs.

### Specifications

Impedance	50 Ohms
Resistance Range	10 to 300 Ohms
Frequency Range	DC to 18 GHz
Power Rating	100% @ 100°C
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C*
Substrate	BeO, AlN or Alumina
Resistor	Thin Film
Tab Contact	Beryllium Copper, Tin or Silver Plated
Cover	Alumina
Solderable Ground Plane	See Plating Option

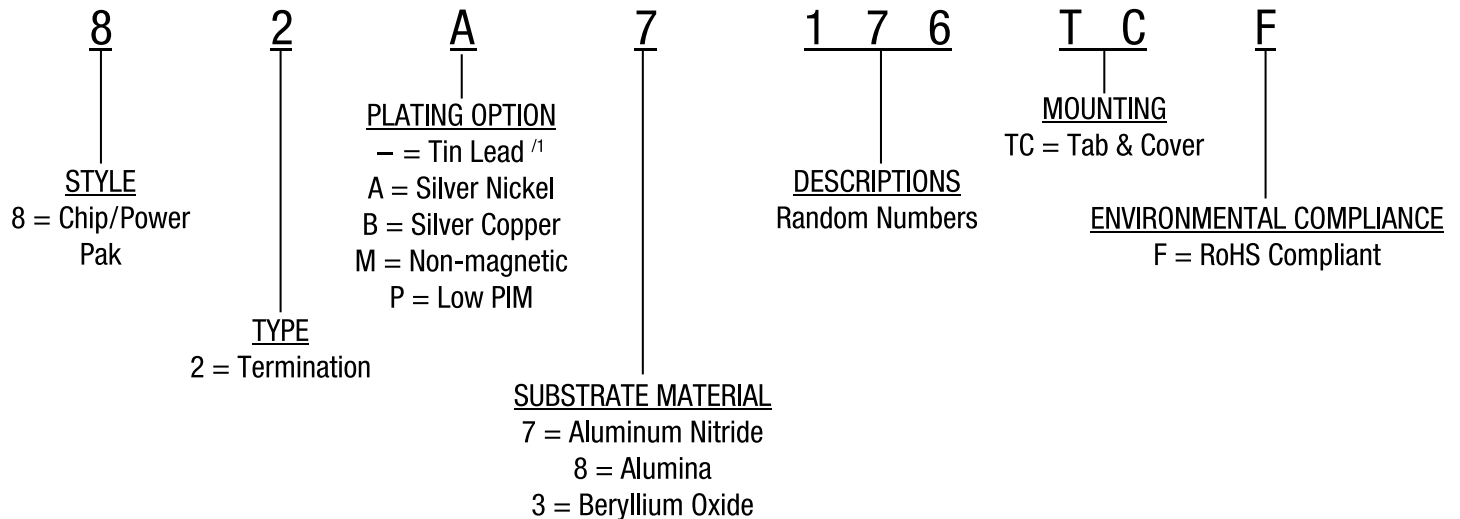
\*100°C is referenced at the heat sink

### TC



"I min" dimension = 3.18 mm [0.125]

### Part Numbering Code



<sup>1</sup> Not RoHS Compliant



## 82 Series

### Product Information

Power	Frequency	VSWR	Substrate	L		W		H		TW		Part Series #
Watt	GHz	Max:1		mm [inches]								
10	2.0	1.18	AlN	5.08	[0.200]	2.54	[0.100]	2.16	[0.085]	0.76	[0.030]	82 7166TC
10	3.0	1.25	AlN	5.08	[0.200]	2.54	[0.100]	2.29	[0.090]	1.02	[0.040]	82 7025TC
10	20.0	1.50	BeO	2.54	[0.100]	5.08	[0.200]	2.29	[0.090]	0.76	[0.030]	82 3056TC
10	18.0	1.65	BeO	2.54	[0.100]	5.08	[0.200]	2.29	[0.090]	1.02	[0.040]	82 3045TC
10	10.0	1.40	BeO	5.08	[0.200]	2.54	[0.100]	2.03	[0.080]	1.02	[0.040]	82 3033TC
10	4.0	1.35	BeO	5.08	[0.200]	2.54	[0.100]	2.29	[0.090]	1.02	[0.040]	82 3001TC
10	4.0	1.35	AlN	5.08	[0.200]	2.54	[0.100]	2.29	[0.090]	2.54	[0.100]	82 7017TC
20	4.0	1.35	BeO	6.35	[0.250]	6.35	[0.250]	2.67	[0.105]	1.52	[0.060]	82 3012TC
30	2.5	1.20	AlN	5.08	[0.200]	2.54	[0.100]	2.16	[0.085]	1.02	[0.040]	82 7004TC
30	2.5	1.20	BeO	3.05	[0.120]	1.53	[0.060]	2.16	[0.085]	0.76	[0.030]	82 3055TC
30	1.0	1.50	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3019TC
30	4.0	1.20	BeO	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.52	[0.060]	82 3005TC
40	2.0	1.20	AlN	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	0.76	[0.030]	82 7030TC
40	6.0	1.20	BeO	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.02	[0.040]	82 3039TC
40	6.0	1.30	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3030TC
60	4.0	1.20	AlN	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	0.76	[0.030]	82 7150TC
60	6.0	1.20	BeO	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	1.52	[0.060]	82 3032TC
60	2.0	1.35	BeO	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.52	[0.060]	82 3003TC
100	4.0	1.20	AlN	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	0.76	[0.030]	82 7163TC
100	1.0	1.10	AlN	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	1.02	[0.040]	82 7005TC
100	6.0	1.30	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3038TC
120	2.0	1.20	AlN	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	0.76	[0.030]	82 7187TC
120	2.0	1.15	AlN	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	0.76	[0.030]	82 7176TC
120	2.0	1.10	AlN	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	0.76	[0.030]	82 7015TC
120	2.0	1.10	BeO	5.84	[0.230]	8.89	[0.350]	2.16	[0.085]	1.02	[0.040]	82 3031TC
125	2.7	1.10	AlN	6.35	[0.250]	6.35	[0.250]	2.16	[0.085]	1.52	[0.060]	82 7013TC
150	2.0	1.15	AlN	9.52	[0.375]	6.35	[0.250]	2.16	[0.085]	0.76	[0.030]	82 7172TC
150	2.0	1.15	AlN	9.52	[0.375]	6.35	[0.250]	2.16	[0.085]	1.02	[0.040]	82 7002TC
150	4.0	1.35	BeO	8.89	[0.350]	5.84	[0.230]	2.16	[0.085]	1.02	[0.040]	82 3051TC
150	4.0	1.35	BeO	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	1.02	[0.040]	82 3023TC
150	1.0	1.35	BeO	6.35	[0.250]	9.52	[0.375]	2.16	[0.085]	3.05	[0.120]	82 3006TC
150	3.0	1.20	AlN	6.22	[0.245]	6.22	[0.245]	1.02	[0.004]	1.02	[0.040]	82 7192TE
250	3.0	1.20	BeO	9.53	[0.375]	6.35	[0.250]	2.24	[0.088]	1.02	[0.040]	82 3213TC
250	2.0	1.50	AlN	9.52	[0.375]	9.52	[0.375]	2.16	[0.085]	1.02	[0.040]	82 7001TC
250	2.0	1.15	BeO	9.52	[0.375]	9.52	[0.375]	2.16	[0.085]	0.76	[0.030]	82 3029TC
250	1.0	1.35	BeO	9.52	[0.375]	9.52	[0.375]	2.16	[0.085]	0.76	[0.030]	82 3008TC
500	1.5	1.35	BeO	12.7	[0.500]	12.70	[0.500]	2.03	[0.080]	1.52	[0.060]	82 3040TC
500	2.5	1.25	BeO	12.7	[0.500]	12.7	[0.500]	1.72	[0.068]	1.52	[0.060]	82 3209TC

Peak power is typically 10 times the max power rating with a 1% duty cycle and 100 microsecond pulse width.

# 32 & 5 Series

## Flange Termination



EMC Technology offers the widest selection of flange mount terminations worldwide. High power flange mount components offer excellent performance and the convenience of bolt-in installation. The flanged mounted devices deliver power ratings up to 1000 watts and frequency ranges from DC to 18 GHz. The packages are available in single hole, double hole and four hole flange configurations. Tab strain relief is available on all configurations.

We also have a line of flange terminations that offers the lowest Passive *Intermodulation* (PIM) distortion in the market and which are 100% tested to guarantee the highest performance.

Optional lead forming is available.

All devices with the "32" prefix have thin film resistor elements while the part numbers beginning with "5" have thick film resistors.

### Specifications

Impedance	50 Ohms
Resistance Range	10 to 250 Ohms
Frequency Range	DC to 18 GHz
Power Rating	100% to 100°C*
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C
Resistor	Thick or Thin Film
Tab Contact	Beryllium Copper, Tin or Silver Plated
Cover	Alumina
Mounting Flange	Copper, Nickel Plated

\*100°C is referenced at the heat sink

### Part Numbering Code

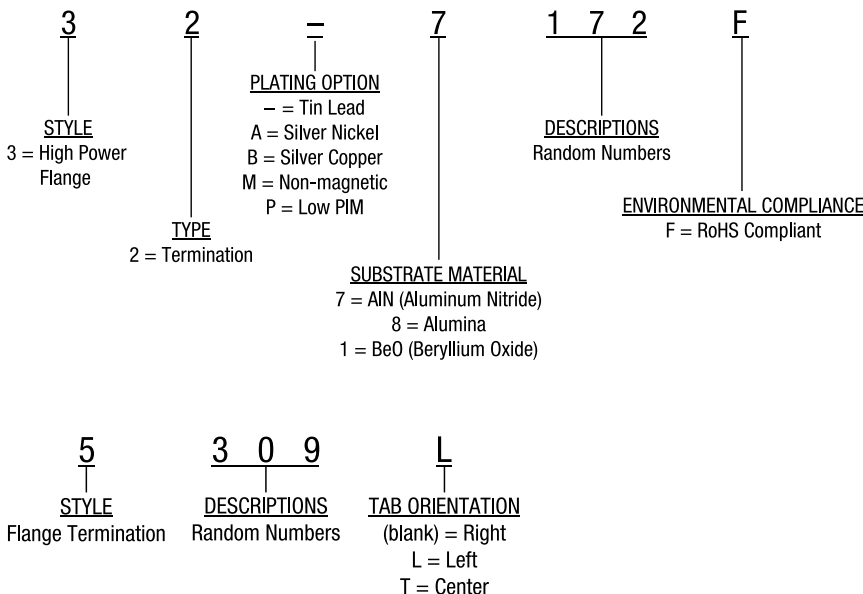


Figure 1L

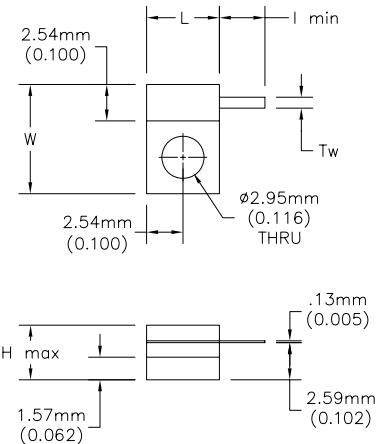


Figure 1C

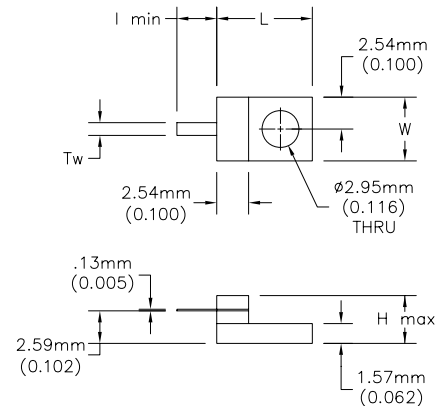


Figure 1R

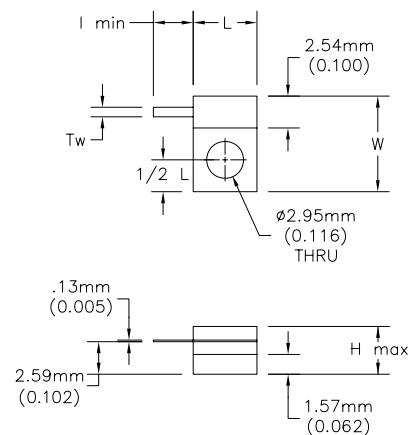






Figure 2L

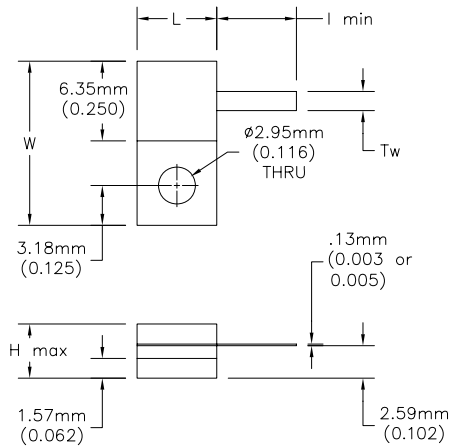


Figure 2C

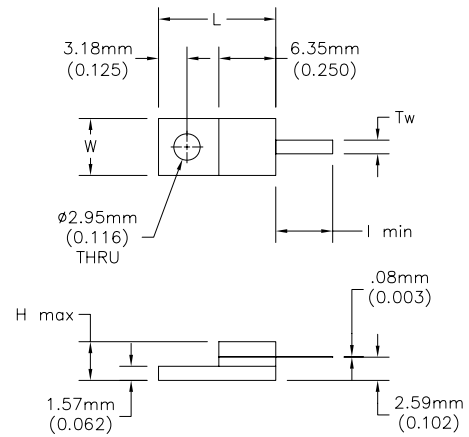


Figure 2R

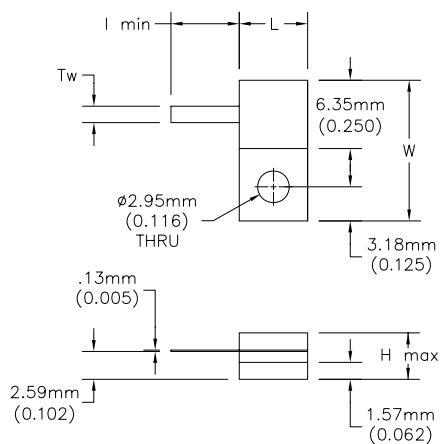


Figure 3

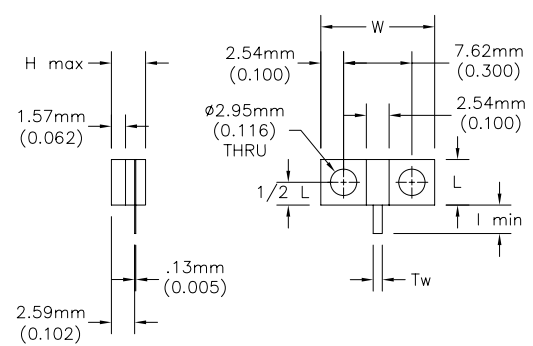


Figure 4

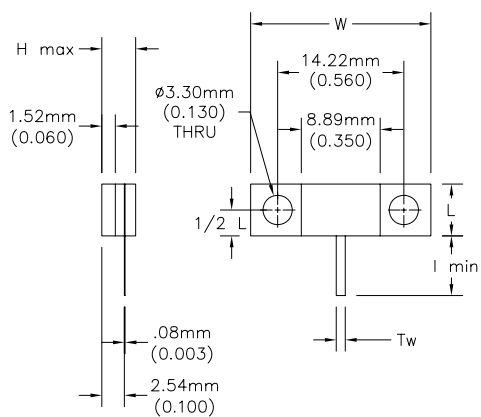
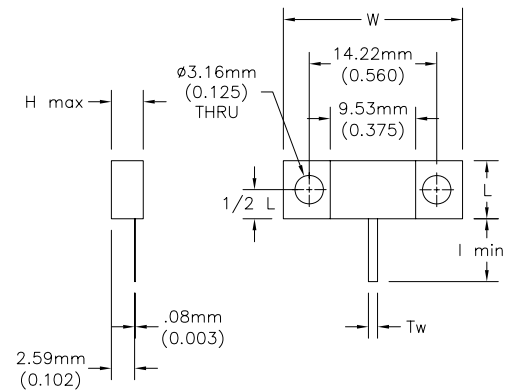
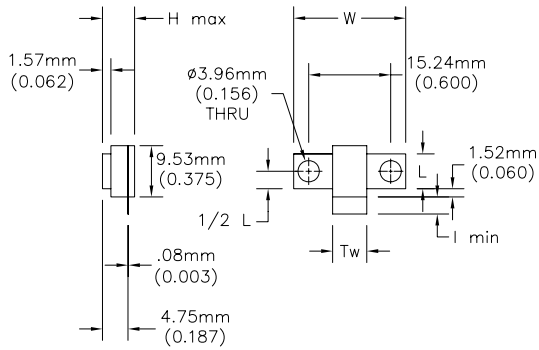


Figure 5

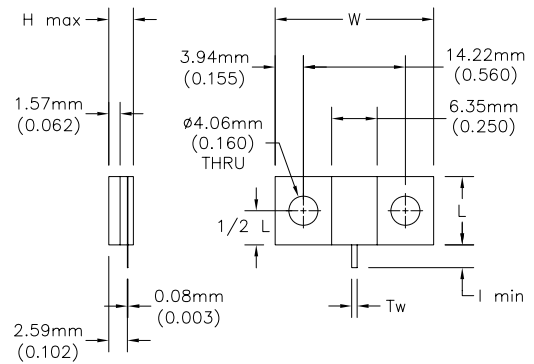




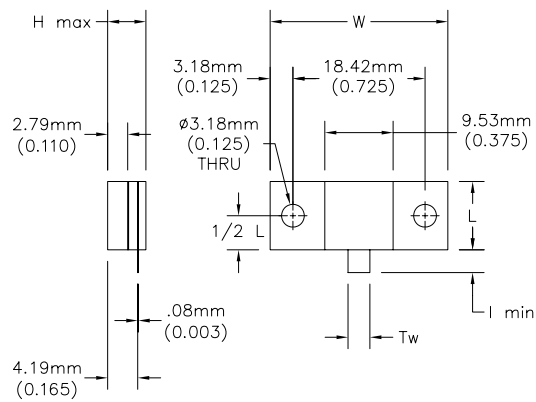
**Figure 6**



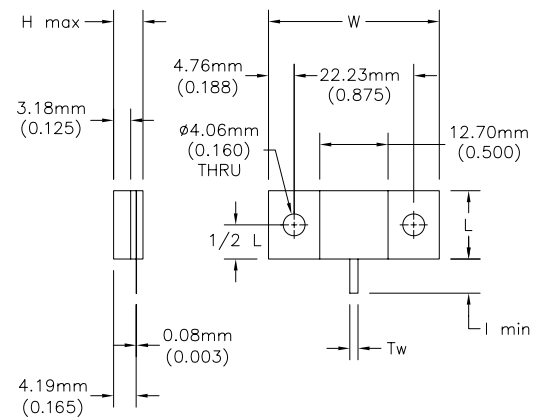
**Figure 7**



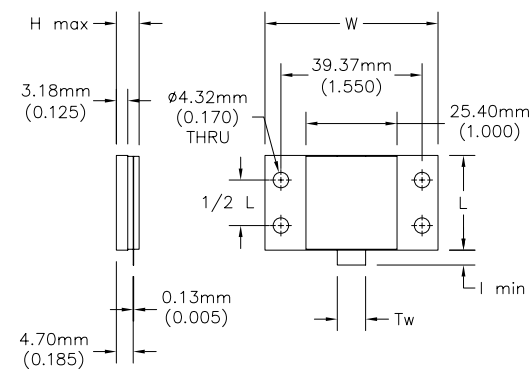
**Figure 8**



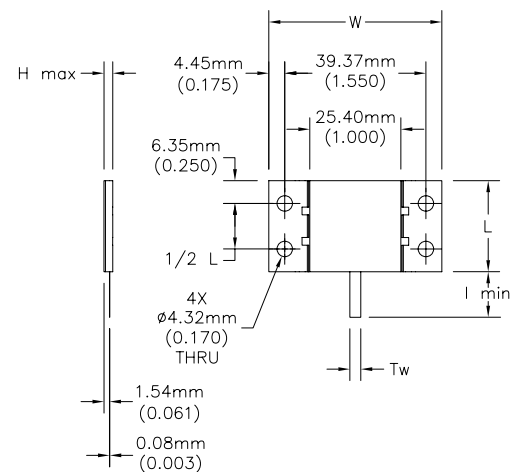
**Figure 9**



**Figure 10**



**Figure 11**





## 32 & 5 Series

### Product Information

Power	Frequency	VSWR	Substrate	L		W		H		TW		Mounting Direction	Part Series #	Figure #
Watt	GHz	Max:1		mm [inches]										
10	18.00	1.60	AlN	7.62	[0.300]	5.08	[0.200]	3.81	[0.150]	0.76	[0.030]	Center	32 7024*	1C
10	6.00	1.25	BeO	7.62	[0.300]	5.08	[0.200]	3.81	[0.150]	1.02	[0.040]	Center	32 1198*	1C
10	18.00	1.50	BeO	7.62	[0.300]	5.08	[0.200]	3.81	[0.150]	1.02	[0.040]	Center	32 1137*	1C
10	10.00	1.40	BeO	5.08	[0.200]	7.62	[0.300]	3.56	[0.140]	1.02	[0.040]	Right	32 1111*	1R
10	10.00	1.40	BeO	5.08	[0.200]	7.62	[0.300]	3.56	[0.140]	1.02	[0.040]	Left	32 1068*	1L
10	4.00	1.35	BeO	5.08	[0.200]	7.62	[0.300]	3.81	[0.150]	1.02	[0.040]	Right	32 1041*	1R
10	4.00	1.35	BeO	5.08	[0.200]	7.62	[0.300]	3.81	[0.150]	1.02	[0.040]	Left	32 1006*	1L
10	4.00	1.35	BeO	12.70	[0.500]	5.08	[0.200]	4.06	[0.160]	1.02	[0.040]	Right	5323*	3
20	2.00	1.35	BeO	6.35	[0.250]	13.08	[0.515]	4.32	[0.170]	1.52	[0.060]	Left	32 1001*	2L
20	2.00	1.35	BeO	13.08	[0.515]	6.35	[0.250]	4.32	[0.170]	1.52	[0.060]	Center	32 1014*	2C
30	4.00	1.20	BeO	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	1.52	[0.060]	Right	32 1039*	2R
30	4.00	1.25	BeO	13.08	[0.515]	6.35	[0.250]	3.56	[0.140]	1.52	[0.060]	Center	32 1035*	2C
30	4.00	1.25	BeO	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	1.52	[0.060]	Left	32 1034*	2L
30	4.00	1.25	BeO	6.35	[0.250]	13.08	[0.515]	3.81	[0.150]	1.52	[0.060]	Left	32 1050*	2L
30	4.00	1.25	BeO	6.35	[0.250]	13.08	[0.515]	3.81	[0.150]	1.52	[0.060]	Right	32 1051*	2R
40	8.40	1.30	BeO	13.08	[0.515]	6.35	[0.250]	3.05	[0.120]	1.02	[0.040]	Center	32 1070*	2C
40	8.40	1.30	BeO	6.35	[0.250]	13.08	[0.515]	3.05	[0.120]	1.02	[0.040]	Right	32 1047*	2R
40	8.40	1.30	BeO	6.35	[0.250]	13.08	[0.515]	3.05	[0.120]	1.02	[0.040]	Left	32 1046*	2L
40	6.00	1.30	BeO	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	1.02	[0.040]	2 Hole	32 1007*	4
50	14.50	1.35	BeO	6.35	[0.250]	13.08	[0.515]	3.81	[0.150]	1.02	[0.040]	Left	32 1200*	2L

Peak power is typically 10 times the max power rating with a 1% duty cycle and 10 microsecond pulse width.

“\*\*” is a place holder. See part number configurations to complete the part number

# 32 & 5 Series

## Product Information



Power	Frequency	VSWR	Substrate	L		W		H		TW		Mounting Direction	Part Series #	Figure #
Watt	GHz	Max:1		mm [inches]										
60	1.50	1.20	BeO	6.48	[0.255]	19.99	[0.787]	3.56	[0.140]	1.52	[0.060]	2 Hole	32 1168*	5
60	2.00	1.35	BeO	13.08	[0.515]	6.35	[0.250]	3.56	[0.140]	1.52	[0.060]	Center	32 1138*	2C
60	6.00	1.20	BeO	6.35	[0.250]	13.08	[0.515]	3.81	[0.150]	1.02	[0.040]	Left	32 1121*	2L
60	6.00	1.20	BeO	6.35	[0.250]	13.08	[0.515]	3.81	[0.150]	1.02	[0.040]	Right	32 1117*	2R
60	6.00	1.20	BeO	6.48	[0.255]	19.99	[0.787]	3.56	[0.140]	1.52	[0.060]	Center	32 1036*	5
60	6.00	1.20	BeO	13.08	[0.515]	6.35	[0.250]	3.81	[0.150]	1.02	[0.040]	Center	32 1122*	2C
60	2.00	1.25	AlN	9.53	[0.375]	22.10	[0.870]	3.48	[0.137]	1.02	[0.040]	2 Hole	32 7196*	7
75	2.40	1.30	BeO	9.52	[0.375]	22.10	[0.870]	5.08	[0.200]	1.52	[0.060]	2 Hole	32 1074*	7
75	1.50	1.40	BeO	9.52	[0.375]	20.83	[0.820]	5.97	[0.235]	6.35	[0.250]	Center	32 1002*	6
100	4.00	1.20	AlN	13.08	[0.515]	6.35	[0.250]	3.56	[0.140]	0.76	[0.030]	Center	32 7165*	2C
100	4.00	1.20	AlN	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	0.76	[0.030]	Right	32 7164*	2R
100	6.00	1.30	BeO	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	1.52	[0.060]	Right	32 1158*	2R
100	6.00	1.30	BeO	13.08	[0.515]	6.35	[0.250]	3.56	[0.140]	1.52	[0.060]	Center	32 1157*	2C
100	6.00	1.30	BeO	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	1.52	[0.060]	Left	32 1156*	2L
100	4.00	1.20	AlN	6.35	[0.250]	13.08	[0.515]	3.81	[0.150]	0.76	[0.030]	Left	32 7163*	2L
100	6.00	1.30	BeO	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	1.02	[0.040]	2 Hole	32 1055*	4
100	4.00	1.25	BeO	20.32	[0.800]	5.84	[0.230]	4.06	[0.160]	1.02	[0.040]	Right	5653*	4
100	4.00	1.25	AlN	20.32	[0.800]	5.84	[0.230]	4.06	[0.160]	1.02	[0.040]	2 Hole	5653ALN	4
110	2.00	1.25	AlN	1.91	[0.075]	22.10	[0.870]	3.48	[0.137]	1.02	[0.040]	2 Hole	32P7197*	7
120	2.00	1.20	AlN	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	0.76	[0.030]	Center	32 7187*	4
120	2.00	1.10	AlN	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	0.76	[0.030]	2 hole	32 7176*	4
120	2.00	1.20	AlN	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	0.76	[0.030]	2 Hole	32 7025*	4
120	2.00	1.10	BeO	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	1.52	[0.060]	Right	32 1162*	2R
120	2.00	1.10	BeO	13.08	[0.515]	6.35	[0.250]	3.56	[0.140]	1.52	[0.060]	Center	32 1161*	2C
120	2.00	1.10	BeO	6.35	[0.250]	13.08	[0.515]	3.56	[0.140]	1.52	[0.060]	Left	32 1160*	2L
120	3.00	1.35	AlN	5.84	[0.230]	20.32	[0.800]	4.32	[0.170]	0.76	0.03	2 Hole	32 7027*	4

Peak power is typically 10 times the max power rating with a 1% duty cycle and 10 microsecond pulse width.

“\*\*” is a place holder. See part number configurations to complete the part number



## 32 & 5 Series

### Product Information

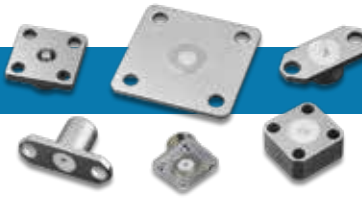
Power	Frequency	VSWR	Substrate	L		W		H		TW		Mounting Direction	Part Series #	Figure #
Watt	GHz	Max:1		mm [inches]										
125	2.00	1.25	AlN	22.22	[0.875]	9.52	[0.375]	4.31	[0.170]	0.76	[0.120]	2 Hole	5307ALN	7
150	2.00	1.15	AlN	9.52	[0.375]	22.10	[0.870]	3.43	[0.135]	0.76	[0.030]	2 Hole	32 7172*	7
150	2.00	1.15	AlN	9.52	[0.375]	22.10	[0.870]	3.43	[0.135]	0.76	[0.030]	2 Hole	32 7023*	7
150	4.00	1.35	BeO	9.52	[0.375]	22.10	[0.870]	3.81	[0.150]	1.02	[0.040]	2 Hole	32 1184*	7
150	4.00	1.35	BeO	9.52	[0.375]	22.10	[0.870]	3.81	[0.150]	1.02	[0.040]	2 Hole	32 1026*	7
150	1.00	1.35	BeO	9.52	[0.375]	22.10	[0.870]	3.81	[0.150]	0.76	[0.120]	2 Hole	32-1003*	7
150	2.50	1.30	AlN	9.53	[0.375]	22.10	[0.870]	3.81	[0.150]	0.76	[0.030]	2 Hole	32 7195*	7
150	2.00	1.25	BeO	22.22	[0.875]	9.52	[0.375]	4.32	[0.170]	0.76	[0.120]	Right	5307*	7
150	2.00	1.25	BeO	22.22	[0.875]	9.52	[0.375]	4.06	[0.160]	0.76	[0.120]	Right	5657*	7
200	1.00	1.20	BeO	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	1.02	[0.040]	2 Hole	32 1201*	4
200	2.00	1.20	BeO	5.84	[0.230]	20.32	[0.800]	3.81	[0.150]	1.02	[0.040]	2 Hole	32 1196*	4
250	2.70	1.30	AlN	9.52	[0.375]	24.76	[0.975]	5.33	[0.210]	0.76	[0.120]	2 Hole	32 7037*	8
250	2.00	1.15	BeO	9.52	[0.375]	24.76	[0.975]	5.33	[0.210]	1.52	[0.060]	2 Hole	32 1191*	8
250	2.00	1.15	BeO	9.52	[0.375]	24.76	[0.975]	5.33	[0.210]	0.76	[0.120]	Center	32 1037*	8
250	1.00	1.35	BeO	9.52	[0.375]	24.76	[0.975]	5.33	[0.210]	0.76	[0.120]	2 Hole	32 1004*	2L
250	3.00	1.2	BeO	9.53	0.375	22.1	0.87	3.35	0.132	1.02	0.04	2 Hole	32 1213*	7
250	1.00	1.05	AlN	9.52	[0.375]	24.76	[0.975]	5.33	[0.210]	0.76	[0.120]	2 Hole	32 7191*	8
250	2.00	1.25	BeO	24.76	[0.975]	9.52	[0.375]	5.21	[0.205]	0.76	[0.120]	2 Hole	5659*	8
350	2.00	1.55	BeO	12.70	[0.500]	31.75	[1.250]	5.46	[0.215]	1.52	[0.060]	2 Hole	32 1123*	9
400	1.00	1.20	BeO	26.42	[1.040]	48.26	[1.900]	6.35	[0.250]	1.52	[0.060]	4 Hole	32 1017*	10
500	2.00	1.25	BeO	12.70	[0.500]	31.75	[1.250]	0.22	[5.460]	1.52	[0.060]	Center	32 1209*	9
500	1.00	1.00	BeO	12.70	[0.500]	31.75	[1.250]	0.24	[5.970]	1.52	[0.060]	Center	32 1212*	9
800	0.50	1.30	BeO	26.42	[1.040]	48.26	[1.900]	6.22	[0.245]	6.35	[0.250]	4 Hole	32 1199*	10
800	0.50	1.50	BeO	26.42	[1.040]	48.26	[1.900]	6.22	[0.245]	6.35	[0.250]	4 Hole	32 1005*	10
800	0.50	1.10	AlN	26.42	[1.040]	48.26	[1.900]	6.22	[0.245]	6.35	[0.250]	4 Hole	32M7200*	10
1000	0.90	1.20	BeO	25.40	[1.000]	48.26	[1.900]	3.18	[0.125]	3.05	[0.120]	Center	32 5001*	11

Peak power is typically 10 times the max power rating with a 1% duty cycle and 10 microsecond pulse width.

“\*\*” is a place holder. See part number configurations to complete the part number

# Stripline Flange Series

## Flange Termination



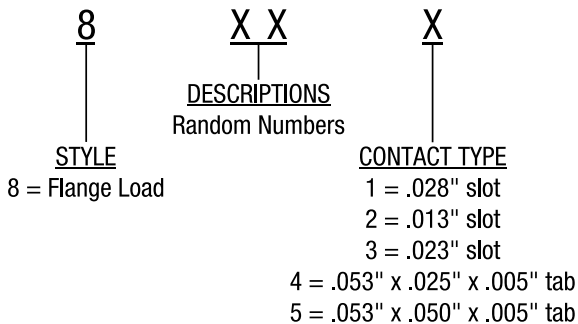
Our Stripline flange terminations are ideal for coaxial isolator applications. Many designs feature a solderless construction. The resistive rod element is staked into the case, forming a highly reliable compression fit. The result is a superior electrical performance which is unaffected by subsequent high temperature manufacturing processes. Many of these products are space-qualified and can be tested for high reliability applications.

Note: Part numbers beginning with "8" offer the solderless construction.

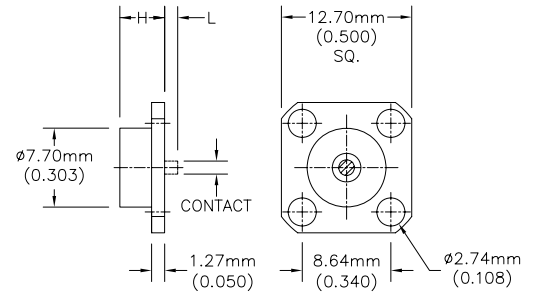
### Specifications

Impedance	50 Ohms +/-5%
Connections	Type N, SMA, SSMA, TNC
Frequency Range	DC to 26.6 GHz
Power Rating	100% @ 100°C
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C
Substrates	BeO or Alumina
Resistive Element	Thin Film
Body	Aluminum with Chromate Finish
Tab or Socket Contact	Beryllium Copper, Gold Plated based on MIL-G-45204
Slot Contact	Brass, Gold Plated per SAE AMS 2422

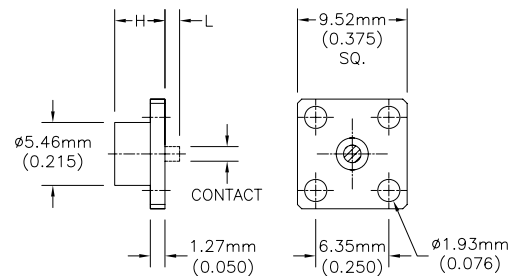
### Part Numbering Code



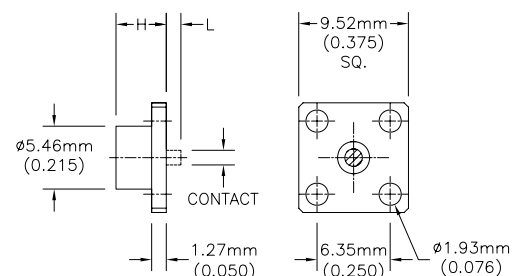
**Figure 1 - 843X Series**



**Figure 2 - 811X Series**



**Figure 3 - 846X Series**



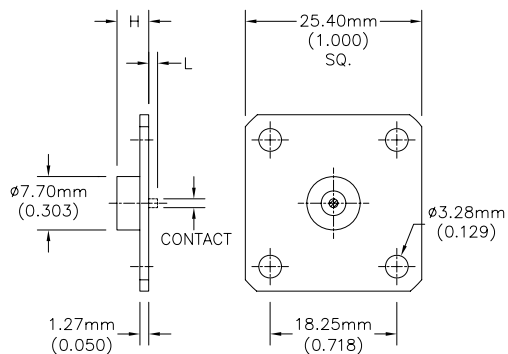
For contact information please refer to Part Numbering Code for Contact Types.



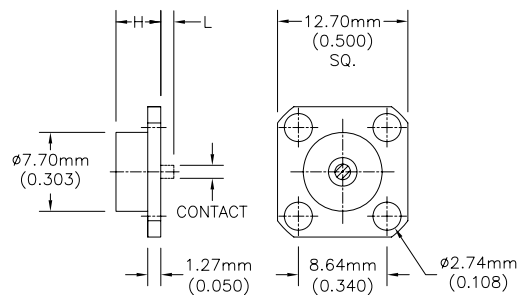
# Stripline Flange Series

## Mechanical Outlines

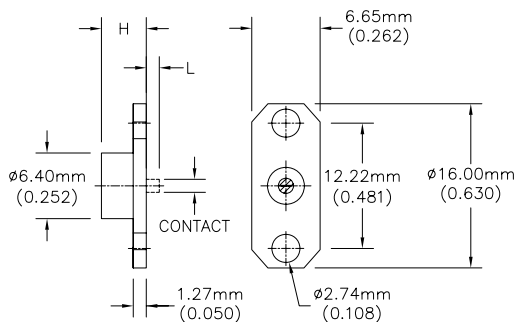
**Figure 4 -  
841X and 842X Series**



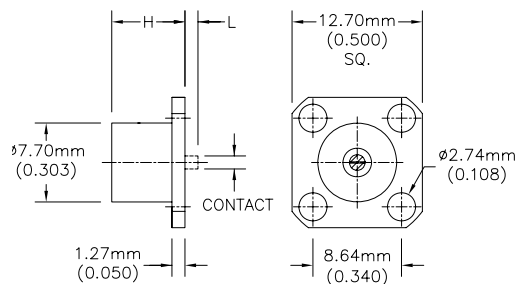
**Figure 5 -  
812X Series**



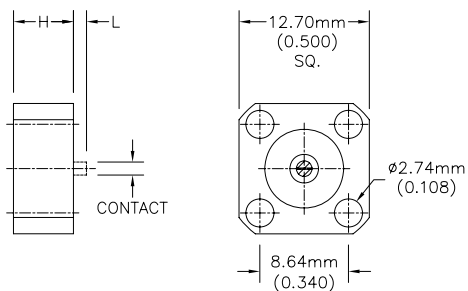
**Figure 6 -  
823X and 827X Series**



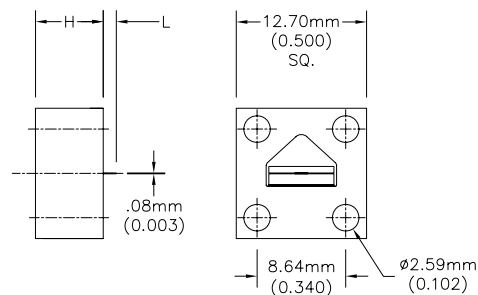
**Figure 7 -  
8482 and 8485 Series**



**Figure 8 -  
8487 and 8488 Series**



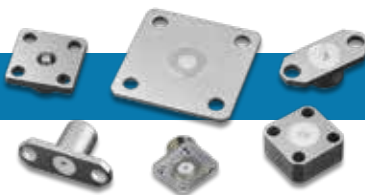
**Figure 9 -  
8750 Series**



For contact information please refer to Part Numbering Code for Contact Types.

# Stripline Flange Series

## Product Information



Power	Freq	VSWR	Substrate	Component Diameter		Contact Height Max		Contact Thickness		Hole Diameter		Mounting	Part Series #	Figure #
Watt	GHz	Max:1		mm [inches]										
1	26.5	1.20	BeO	9.52	[0.375]	4.37	[0.172]	1.35	[0.053]	1.93	[0.076]	4-hole	811*	Fig 2
1	26.5	1.20	BeO	12.7	[0.500]	4.37	[0.172]	1.35	[0.053]	2.74	[0.108]	4-hole	812*	Fig 5
1	18.0	1.30	Alumina	16.00 L x 5.72 W	[0.63 L x 0.225 W]	4.37	[0.172]	1.35	[0.053]	2.74	[0.108]	2-hole	823*	Fig 6
1	12.0	1.20	Alumina	25.4	[1.000]	4.57	[0.180]	1.35	[0.053]	3.28	[0.129]	4-hole	841*	Fig 4
1	18.0	1.30	Alumina	12.7	[0.500]	4.37	[0.172]	1.35	[0.053]	2.74	[0.108]	4-hole	843*	Fig 1
1	18.0	1.30	Alumina	9.52	[0.375]	4.37	[0.172]	1.35	[0.053]	1.93	[0.076]	4-hole	846*	Fig 3
10	18.0	1.40	BeO	16.00 L x 6.65 W	[0.63 L x 0.262 W]	4.37	[0.172]	1.35	[0.053]	2.74	[0.108]	2-hole	827*	Fig 6
10	12.0	1.25	BeO	25.4	[1.000]	4.57	[0.180]	1.35	[0.053]	3.28	[0.129]	4-hole	842*	Fig 4
25	14.5	1.50	BeO	12.7	[0.500]	7.14	[0.281]	1.35	[0.053]	2.74	[0.108]	4-hole	8482	Fig 7
25	14.5	1.50	BeO	12.7	[0.500]	7.14	[0.281]	1.35	[0.053]	2.74	[0.108]	4-hole	8485	Fig 7
25	14.5	1.50	BeO	12.7	[0.500]	7.14	[0.230]	1.35	[0.053]	2.74	[0.108]	4-hole	8487	Fig 8
25	14.5	1.50	BeO	12.7	[0.500]	7.14	[0.230]	1.35	[0.053]	2.74	[0.108]	4-hole	8488	Fig 8
75	5.0	1.50	BeO	12.7	[0.500]	6.35	[0.260]	0.08	[0.003]	2.59	[0.102]	4-hole	875*	Fig 9

Peak power is typically 10 times the max power rating with a 1% duty cycle and 10 microsecond pulse width.

Please call for your specific application.

“\*\*\*” except where L and W are noted

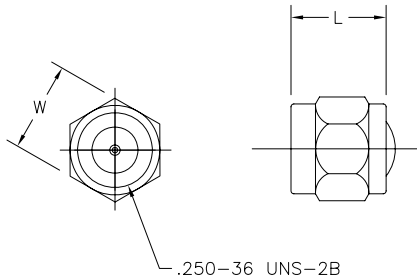
“\*\*” is a place holder. See part number configurations to complete the part number

- X = 1 .028 Slot
- 2 .013 Slot
- 3 .023 Slot
- 4 .025 Wide Tab
- 5 .050 Wide Tab

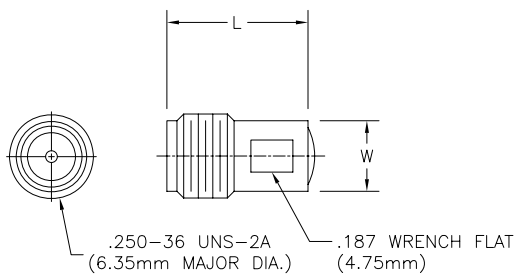




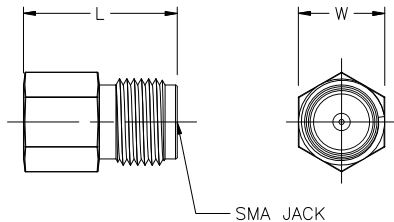
**Figure 1 - SMA Plug/Male**



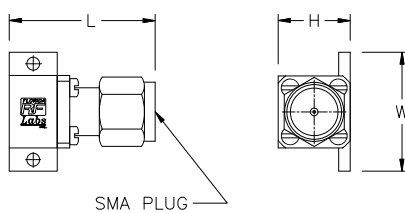
**Figure 2 - SMA Jack/Female**



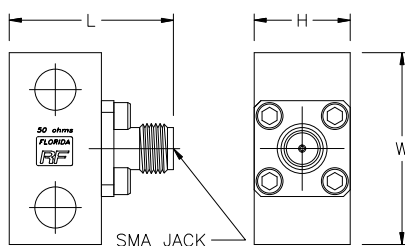
**Figure 3 - SMA Jack/Female**



**Figure 4 - High Power SMA**



**Figure 4a**



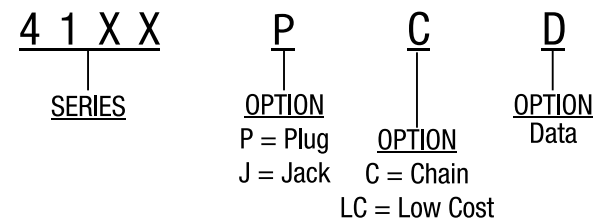
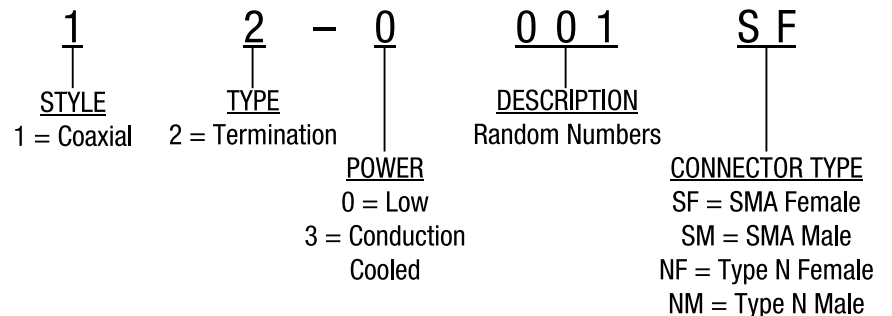
**Figure 4b**

Attenuators aren't the only products where we have combined EMC Technology components with Florida RF Labs connector expertise! We also offer a complete series of SMA, 3.5 mm and 2.9 mm interface compatible coaxial terminations. Some designs are specifically suited for narrow or wide band applications. These terminations have low VSWR, and operate at frequencies from DC to 26.5 GHz. They are ideal for both laboratory measurements and system use.

### Specifications

Impedance	50 Ohms
Connector	SMA, 3.5mm, 2.9mm
Frequency Range	DC to 26.5 GHz
Power	0.5 to 3 Watts
Power Rating	100% @ 100°C
Derates to	0% @ 150 °C
Operating Temperature	-55 °C to 150 °C
Resistor	Thin Film
Substrate	BeO or Alumina
Body & Coupling Nut Material	Stainless Steel
Body & Coupling Nut Finish	Passivated
Contact	Beryllium Copper
Contact Finish	Gold

### Part Numbering Code



# 12 & 41 Series

## Product Information



### Low Power

Part Series #	Power (Watts)	Substrate	Max Freq (GHz)	VSWR Max:1	L		W		Figure #
					mm [inches]				
12-0001*	1.0	Alumina	18.0	1.15	8.89	[0.350]	7.92	[0.312]	1
12-0002*	1.0	Alumina	26.5	1.10	8.89	[0.350]	7.92	[0.312]	1
12-0006*	0.5	Alumina	12.4	1.17	13.33	[0.525]	7.92	[0.312]	1
12-0007*	0.5	Alumina	6.0	1.10	8.89	[0.350]	7.92	[0.312]	1
12-0008*	1.0	Alumina	18.0	1.30	8.89	[0.350]	7.92	[0.312]	1
12-0009*	3.0	BeO	18.0	1.20	13.33	[0.525]	7.92	[0.312]	1
12-0028*	1.0	Alumina	2.0	1.10	8.89	[0.350]	7.92	[0.312]	1
12-0101*	1.0	Alumina	18.0	1.15	13.33	[0.525]	7.92	[0.312]	2
12-0102*	1.0	Alumina	26.5	1.10	13.33	[0.525]	7.92	[0.312]	2
4110J	2.0	Alumina	18.0	1.20	11.30	[0.445]	6.35	[0.250]	3
4111P	2.0	Alumina	18.0	1.15	12.70	[0.500]	7.92	[0.312]	1
4111PCD	2.0	Alumina	18.0	1.10	12.70	[0.500]	7.92	[0.312]	1
4112P	1.0	Alumina	18.0	1.25	8.38	[0.330]	7.92	[0.312]	1
4112PLC	1.0	Alumina	2.5	1.05	8.38	[0.330]	7.92	[0.312]	1
4113P	1.0	Alumina	18.0	1.15	8.38	[0.330]	7.92	[0.312]	1
4113PCD	1.0	Alumina	18.0	1.10	8.38	[0.330]	7.92	[0.312]	1

Peak power is typically 10 times the max power rating with a 1% duty cycle and 10 microsecond pulse width.

Please call for your specific application

“\*\*” is a place holder. See part number configurations to complete the part number.

### Conduction Cooled

Part Series #	Power (Watts)	Substrate	Max Freq (GHz)	VSWR Max:1	L		W		H		Figure #
					mm [inches]						
12-3001*	15.0	BeO	18.0	1.20	6.35	[0.250]	15.75	[0.620]	9.53	[0.375]	4
12-3002*	15.0	BeO	18.0	1.30	12.19	[0.480]	25.40	[1.000]	12.70	[0.500]	4
12-3005*	50.0	BeO	6.0	1.35	34.93	[1.375]	24.38	[0.960]	14.22	[0.560]	4
12-3007*	100.0	BeO	3.0	1.25	34.93	[1.375]	24.38	[0.960]	14.22	[0.560]	4
12-3022*	25.0	BeO	18.0	1.25	17.27	[0.680]	22.23	[0.875]	12.70	[0.500]	4

Peak power is typically 10 times the max power rating with a 1% duty cycle and 10 microsecond pulse width.

Please call for your specific application

“\*\*” is a place holder. See part number configurations to complete the part number.