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*

Figure 1 - SMA Plug/Male

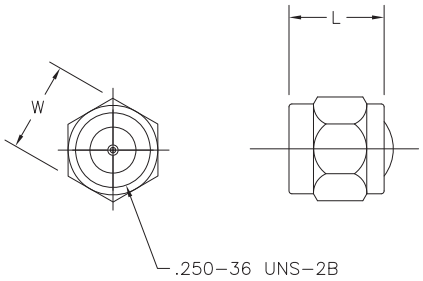

Figure 2 - SMA Jack/Female

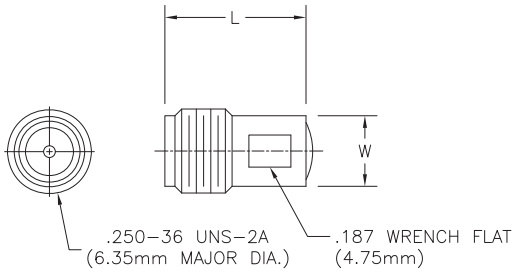

Figure 3 - SMA Jack/Female

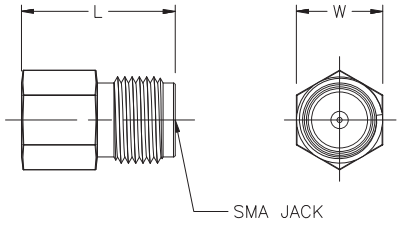

Figure 4 - High Power SMA

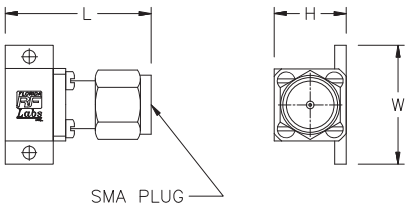

Figure 4a

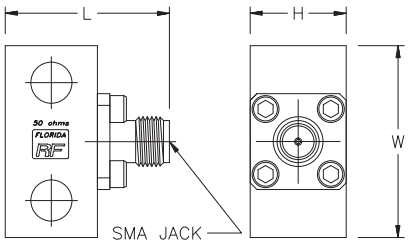

Figure 4b

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

1 — STYLE: 1 = Coaxial

2 — TYPE: 2 = Termination

0 — POWER: 0 = Low; 3 = Conduction Cooled

001 — DESCRIPTION: Random Numbers

SF — CONNECTOR TYPE: SF = SMA Female; SM = SMA Male; NF = Type N Female; NM = Type N Male

41XX — SERIES

P — OPTION: P = Plug; J = Jack

C — OPTION: C = Chain; LC = Low Cost

D — OPTION: Data

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.