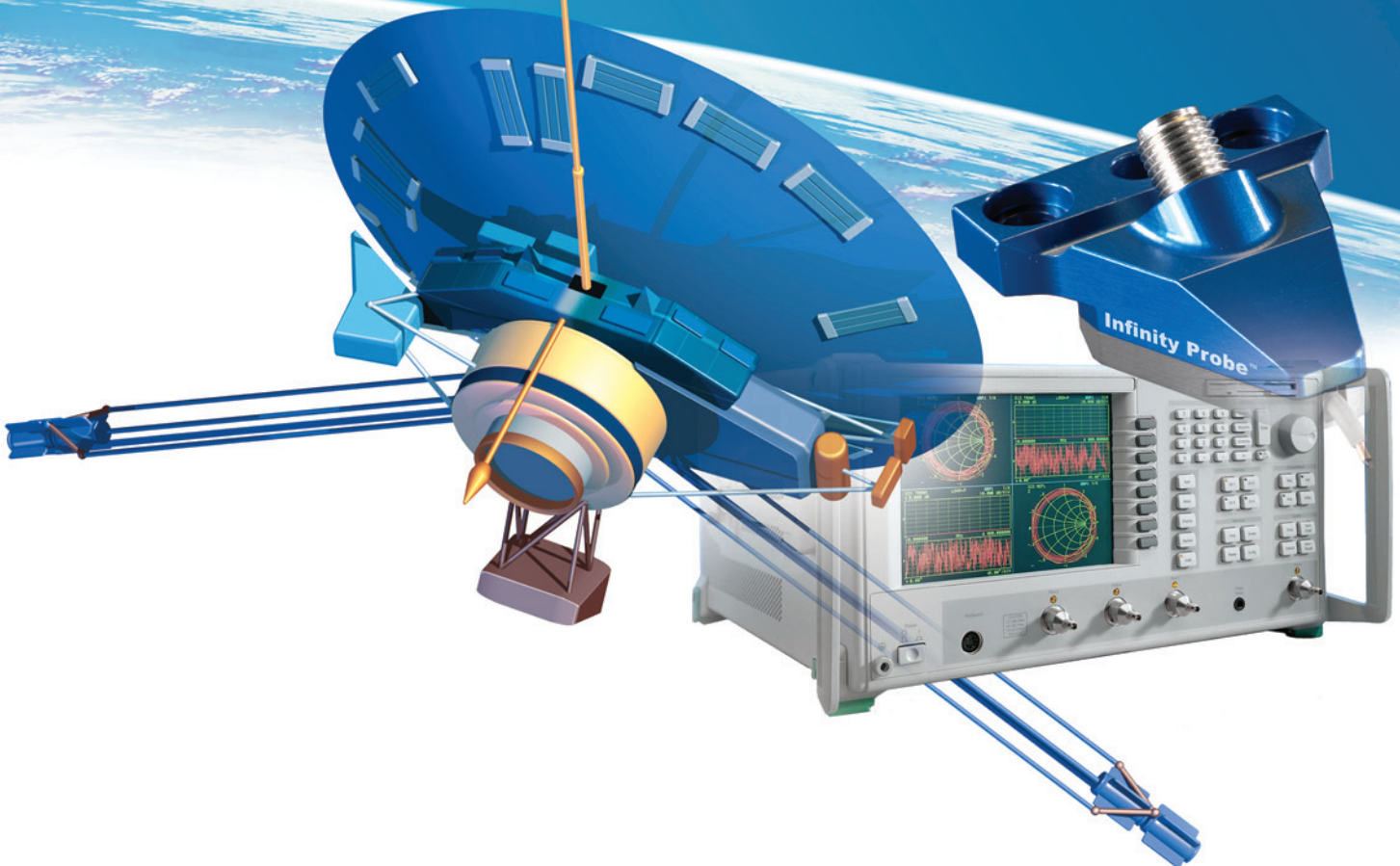


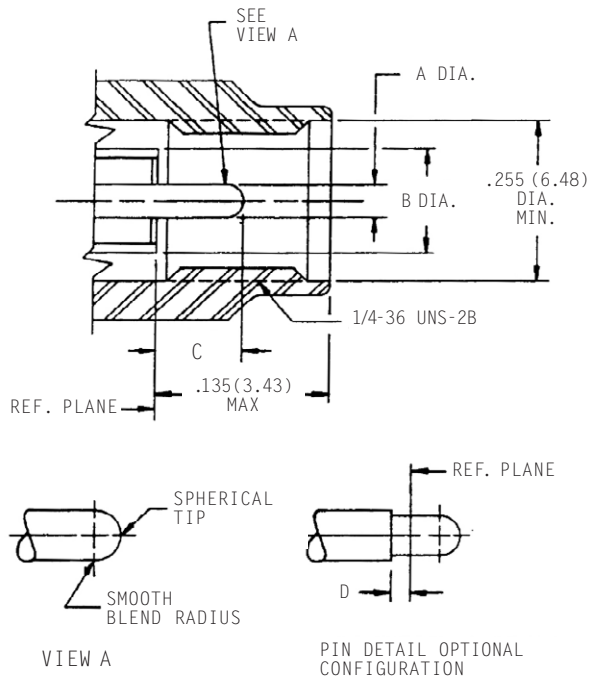
# SV MICROWAVE<sup>®</sup>

SVK Connectors & Components

2.92mm



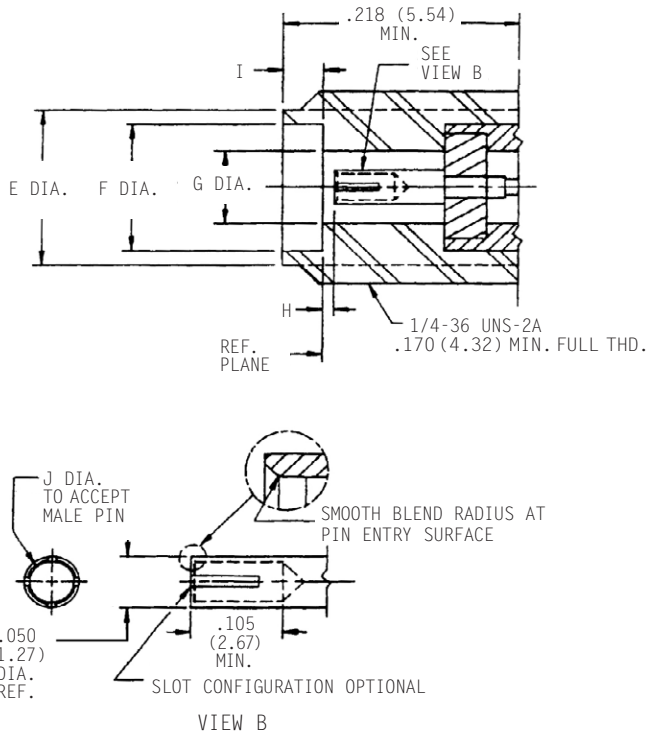
## Interface Mating Dimensions



### Plug

Letter	Inches (Millimeters)	
	Minimum	Maximum
A	.0355 (0.90)	.0370 (0.94)
B	.178 (4.52)	.180 (4.57)
C	.055 (1.40)	.065 (1.65)
D	.000 (0.00)	.005 (0.13)

Dimensions are in inches.  
Metric equivalents are given for general information only.  
Unless otherwise specified, tolerances are  $\pm 0.005$  (0.13).  
The location of the contact support bead shall not extend beyond the reference plane.



### Jack

Letter	Inches (Millimeters)	
	Minimum	Maximum
E	.206 (5.23)	.214 (5.44)
F	.181 (4.60)	.183 (4.65)
G	.114 (2.90)	.116 (2.95)
H	.000 (0.00)	.005 (0.13)
I	.074 (1.88)	0.78 (1.98)
J	.0355 (0.90)	0.370 (0.94)

Dimensions are in inches.  
Metric equivalents are given for general information only.  
Unless otherwise specified, tolerances are  $\pm 0.005$  (0.13).

## Specifications

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**General:**

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Materials	Body: Steel, corrosion-resistant Type 303 (stainless) per ASTM A484 and A582 Contacts: Beryllium copper per ASTM-B-196, alloy C17300, Condition TD04 Insulator: Ultem – Standard (or Kel-F Available)
Finish	Body: Passivated per QQ-P-35, Type II. Cable Connector Housing at the point of solder attachment: Gold per ASTM-B-488, Type II, Grade C over nickel per QQ-N-290, Class 2 Contact: Gold per ASTM-B-488, Type II, Grade C over nickel per QQ-N-290, Class 1
Design	Interface dimensions per MIL-STD-348

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**Electrical:**

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Frequency	DC – 40 GHz (usable to 46 GHz)
Nominal Impedance	50 Ohms
VSWR	Connectors/Terminations: $\leq 1.25:1$ , DC – 40 GHz Attenuators: 1.30, DC – 26.5 GHz; 1.40, 26.5 – 40 GHz
Insertion Loss	.04(f) <sup>1/2</sup> where f = GHz
Attenuation Accuracy	$\pm 0.5$ dB, DC – 26.5 GHz $\pm 0.8$ dB (20 dB @ $\pm 1.0$ dB), 26.5 – 40 GHz

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**Mechanical:**

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Connector Durability	500 Cycles Min.
Contact Torque	4.0 inch-ounces Min.
Coupling Nut Mating Torque	8 – 10 in-lbs.

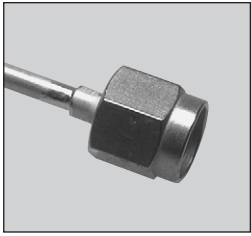
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**Environmental:**

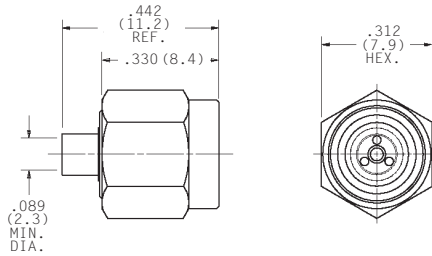
---

Temperature Rating	-55° C to +135° C for Ultem - Standard (-55° C to +165° C for Kel-F – Available)
Corrosion (Salt Spray)	MIL-STD-202, Method 101, Test Condition B 5% Salt Solution
Vibration High Frequency	MIL-STD-202, Method 204, Test Condition D (20 Gs)
Shock	MIL-STD-202, Method 213, Condition I, 100 Gs
Moisture Resistance	MIL-STD-202, Method 106, Less Step 7B

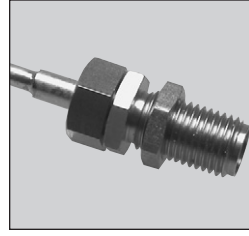
## Cable Plug



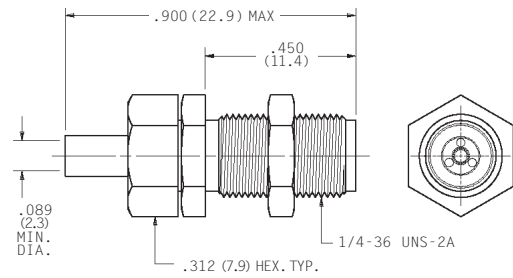
Part Number	Cable
<b>SF1503-6103</b>	.085



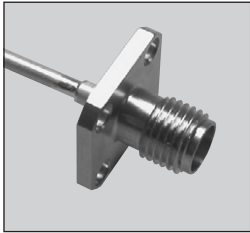
## Bulkhead Feedthrough Cable Jack



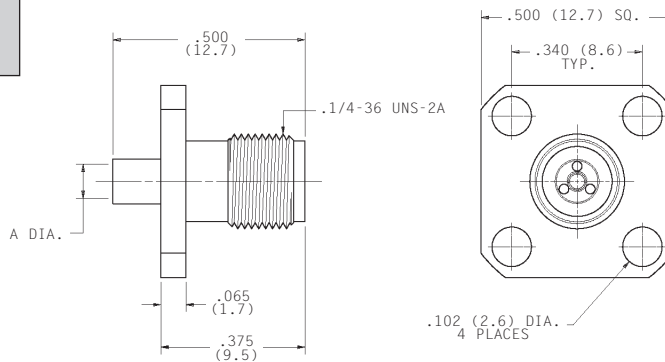
Part Number	Cable
<b>SF1543-6106</b>	.085



## Flange Mount Cable Jack

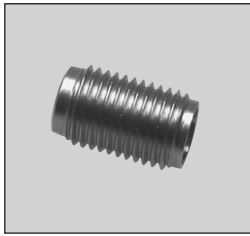


Part Number	Cable	A Dia.
<b>SF1533-6002</b>	.085	.089 (2.3) Min.
<b>SF1533-6001</b>	.047	.050 (11.27) Min.



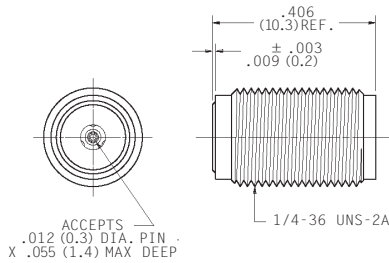
## Jack Launcher (Sparkplug)

For Use With .012 Dia. Pin Glass Bead



**Part Number**  
**SF1575-6007**

Glass Bead  
Part Number  
066-15-000  
required for  
installation in a  
hermetic package.



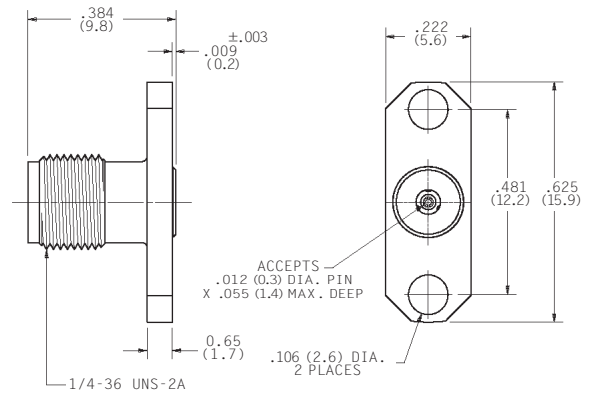
## Flange Mount Jack Launcher

For Use With .012 Dia. Pin Glass Bead



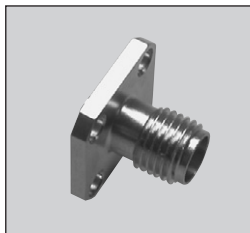
**Part Number**  
**SF1552-6002**

Glass Bead  
Part Number  
066-15-000  
required for  
installation in a  
hermetic package.



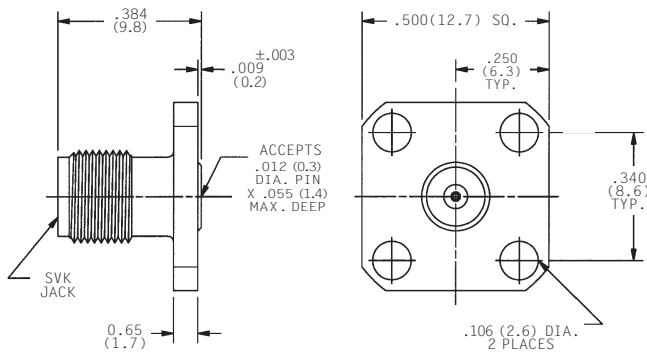
## Flange Mount Jack Launcher

For Use With .012 Dia. Pin Glass Bead



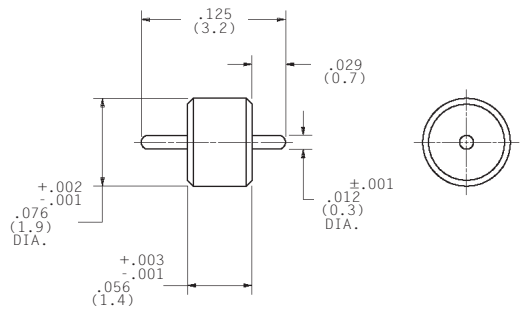
**Part Number**  
**SF1550-6400**

Glass Bead  
Part Number  
066-15-000  
required for  
installation in a  
hermetic package.

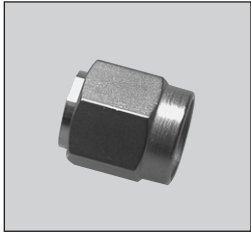


## Glass Bead

**Part Number**  
**066-15-000**



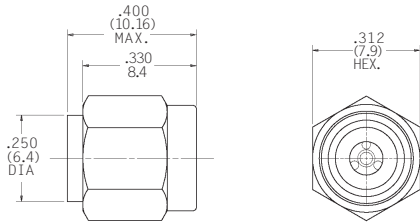
## Plug Termination



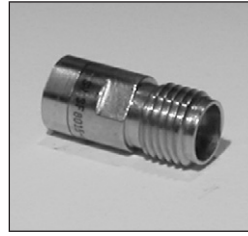
Part Number

**SF8015-6002**

Power: 0.5 W avg.



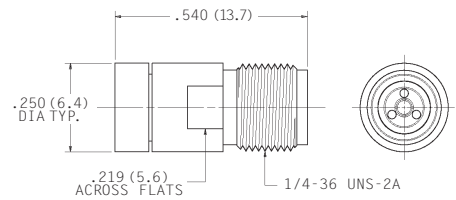
## Jack Termination



Part Number

**SF8015-6400**

Power: 0.5 W avg.

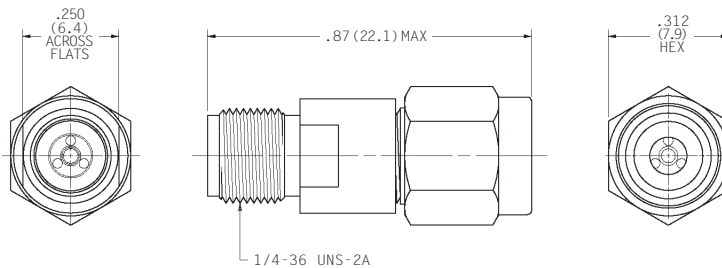


## Attenuators

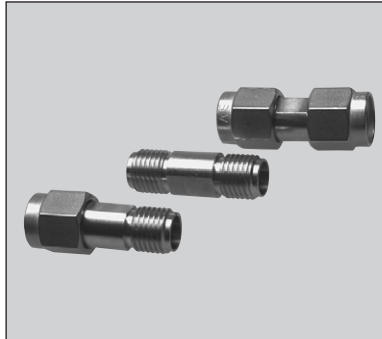


Part Number	Attenuation (dB)	Attenuation Accuracy	
		DC – 26.5 GHz	26.5 – 40 GHz
<b>SF0915-6200-03</b>	3.0 ± 0.30	± 0.5 dB	± 0.8 dB
<b>SF0915-6200-06</b>	6.0 ± 0.30	± 0.5 dB	± 0.8 dB
<b>SF0915-6200-10</b>	10.0 ± 0.30	± 0.5 dB	± 0.8 dB
<b>SF0915-6200-20</b>	20.0 ± 0.30	± 0.6 dB	± 1.0 dB

Average Power: 0.5 W, derated linearly from .05 W at +25°C to 0.25 W at +135°C.  
Peak Power: 100 W for a duty cycle of  $5 \times 10^{-4}$  max. pulse duration of 5 msec.



## In-Series Adapters



Part Number	Description
<b>SF1593-6000</b>	SVK Plug to SVK Plug
<b>SF1590-6000</b>	SVK Jack to SVK Jack
<b>SF1597-6003</b>	SVK Plug to SVK Jack

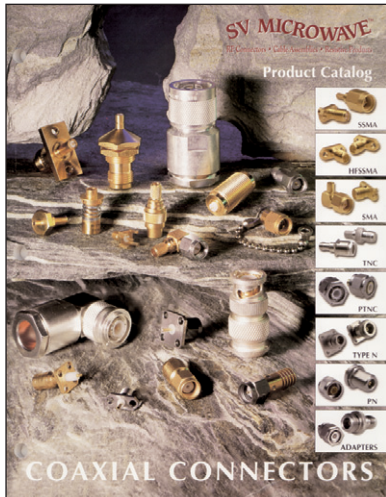
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## Between-Series Adapters

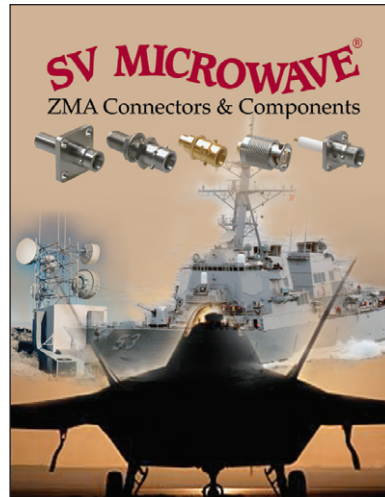


Part Number	Description
<b>SF1116-6002</b>	SVK Jack to 2.4mm Plug
<b>SF1116-6004</b>	SVK Jack to 2.4mm Jack
<b>SF1116-6007</b>	SVK Plug to 2.4mm Plug
<b>SF1116-6003</b>	SVK Plug to 2.4mm Jack
<b>SF1115-6007</b>	SVK Jack to SMA Plug
<b>SF1115-6005</b>	SVK Jack to SMA Jack
<b>SF1115-6011</b>	SVK Plug to SMA Plug
<b>SF1115-6009</b>	SVK Plug to SMA Jack

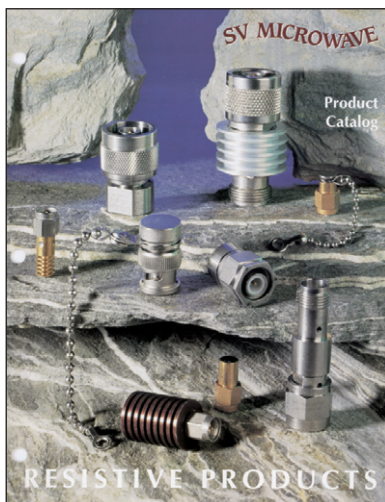
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for information on...



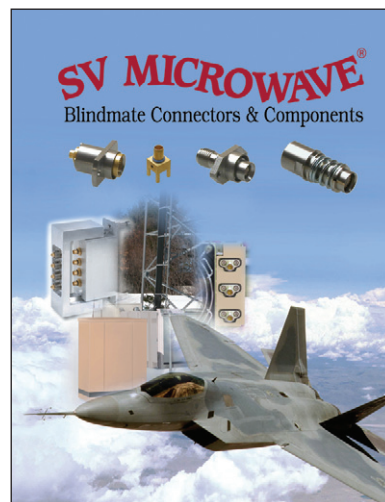
Coaxial Connectors



ZMA Connectors & Components



Resistive Products



Blindmate Connectors & Components

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RF Connectors & Components

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Website: [www.svmicrowave.com](http://www.svmicrowave.com)