

## High RF Power Bias-T plus Surge Arrestor 7/16DIN RF connectors and SMA DC Port 0.82 – 2.2GHz



- ✦ Injects or retrieves dc power
- ✦ 50X The Industry Impulse Life
- ✦ Maintenance Free
- ✦ Exceptional RF Performance
- ✦ >80kA Surge Capability
- ✦ Rugged and Waterproof
- ✦ Bi-directional Protection
- ✦ High RF Power and Low PIM

### RF Specifications

- ✦ Nominal Impedance – 50 Ω

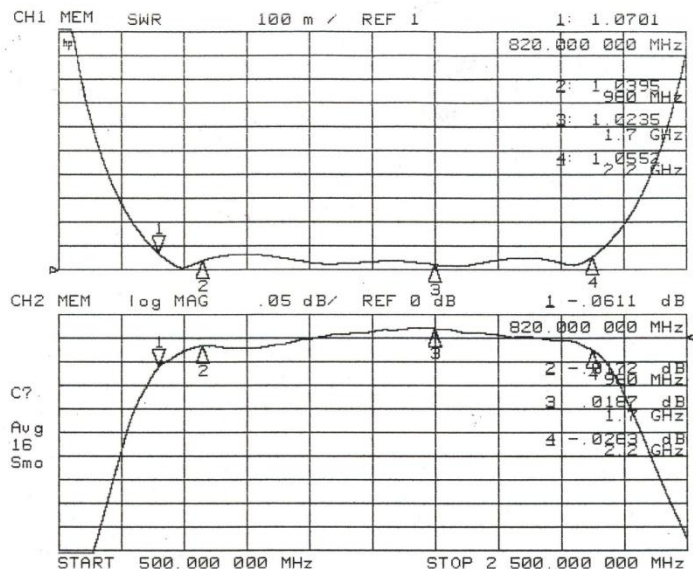
<b>Frequency</b>	0.82 – 2.2GHz	
<b>RF Power</b>	2 kW rms / 25 kW peak	
<b>Return Loss</b>	-32dB typ	-26.4dB min
<b>VSWR</b>	1.05:1 typ	1.10:1 max
<b>Insertion Loss</b>	0.05dB typ	0.10dB max
<b>PIM (2x43dBm)</b>	> -150dB (3 <sup>rd</sup> order)	> -173dB (5 <sup>th</sup> order)

- ✦ Through Current: up to 65V / 5A Max

### Transient Current Protection

Transient Current*	Strikes	Bias-T Status	Equipment Status
120kA	1	Replace	Protected
80kA	1	Operational / Replace	Protected
60kA	10	Operational	Protected
30kA	50+	Operational	Protected

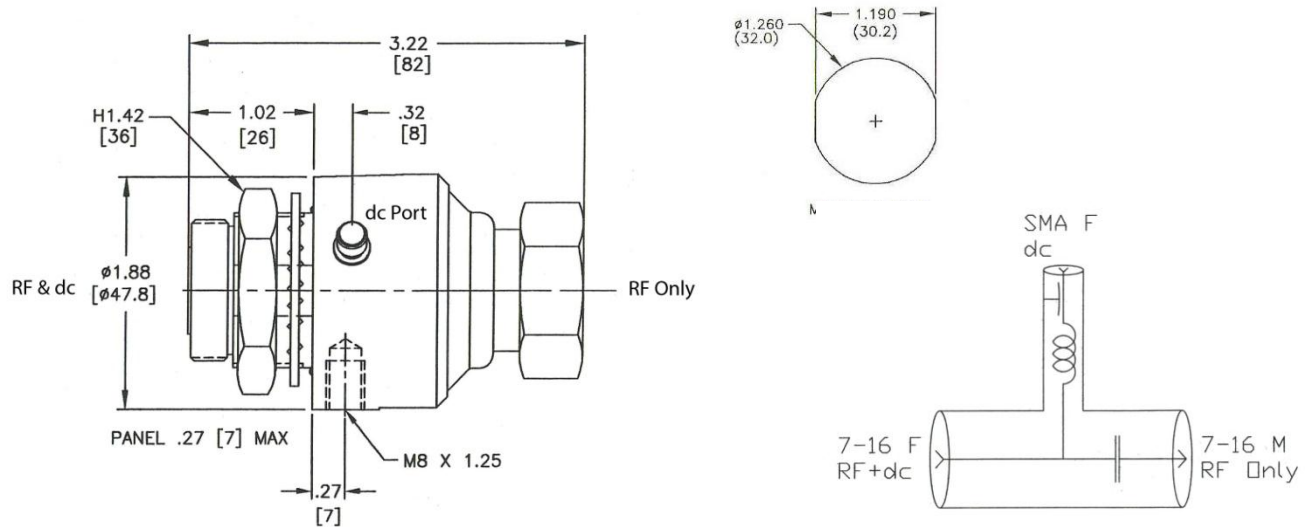
\* 8x20µs current waveform



Typical VSWR and Insertion Loss

### Mechanical Specifications

★ Weight: 0.8 lbs. (360g) typical



### Environmental Specifications

<b>Temperature Range</b>	-40°C to +90°C
<b>Salt Fog</b>	MIL-STD-202 Method 101D / Condition B (35°C/96 hrs)
<b>Immersion</b>	MIL-STD-202 Method 104A / Condition A (65°C to 25°C w/NaCl – 2 cycles)
<b>Moisture Resistance</b>	MIL-STD-202 Method 106E (65 °C/98% RH condensing/240 hrs)
<b>Temperature Shock</b>	MIL-STD-202 Method 107D / Condition B-1 (25 cycles -65°C to +125°C)
<b>Life (Elevated Temperature)</b>	MIL-STD-202 Method 108A / Condition A (96 hours at 100°C)
<b>Dust and Waterproof Rating</b>	IEC529 IP68 (dust-tight and water proof 24 hrs / 1 m)
<b>Vibration</b>	MIL-STD-202 Method 204D / Condition D (10Hz-2kHz 0.06"DA/20g)
<b>Mechanical Shock</b>	MIL-STD-202 Method 213 / Condition A (50g/11ms ~24")

### Material and Finish

Component	Material	Finish
Outer Parts	Brass	Guardplate™
Center Contact	Brass / Bronze	Silver
Insulator	PTFE	
Gasket	Si Rubber	

Guardplate™ is an alloy finish with the PIM and conductivity of Silver and the durability and anti-tarnish properties of Nickel.

### Transient Performance

<b>Throughput Voltage</b>
90Vpk / 25μJ (6kV / 3kA impulse energy into 50Ω)
<b>DC Current Performance</b>
Up To 65Vdc / 5Adc max. at 200mV drop max. (Various dc voltages are available)