



# Gore™ Spaceflight Microwave

ASSEMBLIES

*High Frequency 0.190" Cable Performing Through 30GHz*

## GENERAL CHARACTERISTICS

Frequency Range	DC-30 GHz
Impedance	50 ±1 ohms

## ELECTRICAL CHARACTERISTICS

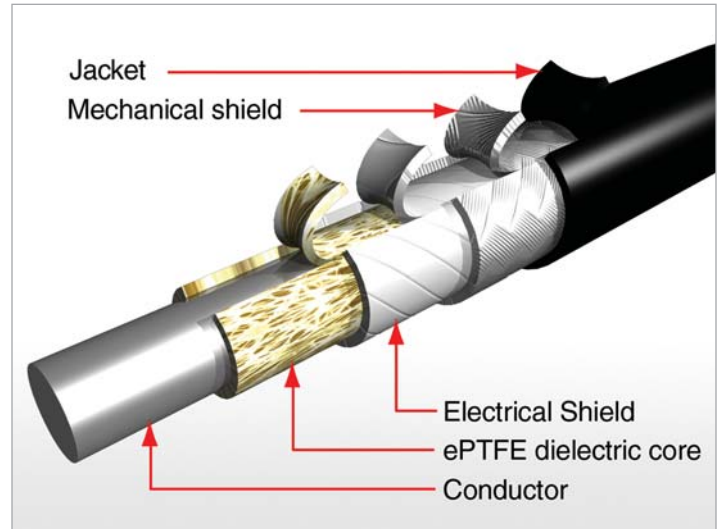
<b>Insertion Loss</b>	
Guarantee	$.04 + .0123 * (f) + (-.00412 * \sqrt{(f) + (L/12)}) * [.00269 + .0025 * (f) + .0736 * \sqrt{(f)}]$
Typical	$.0247 + .01052 * (f) + (-.01148 * \sqrt{(f) + (L/12)}) * [.00077 + .00089 * (f) + .07194 * \sqrt{(f)}]$
where:	f = frequency in GHz L = Assembly length in inches
<b>VSWR</b>	
Guarantee	<1.30:1 straight; 1.35:1 swept DC-30 GHz
Typical	<1.20:1 DC-30 GHz
<b>Screening Effectiveness, Typical</b>	90 dB DC-18 GHz 75dB 18-40 GHz (per MIL-STD-1344, Method 3008)
<b>DWV</b>	1000 VAC RMS minimum

## CABLE SPECIFICATIONS

GORE™ Cable Part Number	5D
Cable Outer Diameter	0.190 inch (4.8mm) (nominal)
Mass	16 grams/foot (nominal)
Minimum Bend Radius	1.0 inch (25.4mm)

## CABLE MATERIALS

Center Conductor	Silver-plated copper wire, solid
Dielectric	Expanded PTFE (ePTFE), tape-wrapped
Electrical Shield	Silver-plated flat copper wire, helically-wrapped
Mechanical Braid	Silver-plated round copper wire, braided
Jacket	Extruded Tefzel® (ETFE), black



## CONNECTOR MATERIALS

Front Body	Stainless steel, passivated
Center Contact	Copper-Beryllium, gold plated
Insulators	Polyetherimide (PEI)
Coupling Nut	Stainless steel, passivated
Hat	Brass, gold plated
Swept Hat (right-angle version only)	Copper-Beryllium, gold plated

## CONNECTOR OPTIONS

Type	Configuration	P/N	Max. Freq.
2.92mm	Straight Pin	ZMQ	30 GHz
2.92mm	Right Angle Pin	ZMR	30 GHz
SMA	Straight Pin	ZN1	22 GHz*
SMA	Right Angle Pin	ZN2	22 GHz*

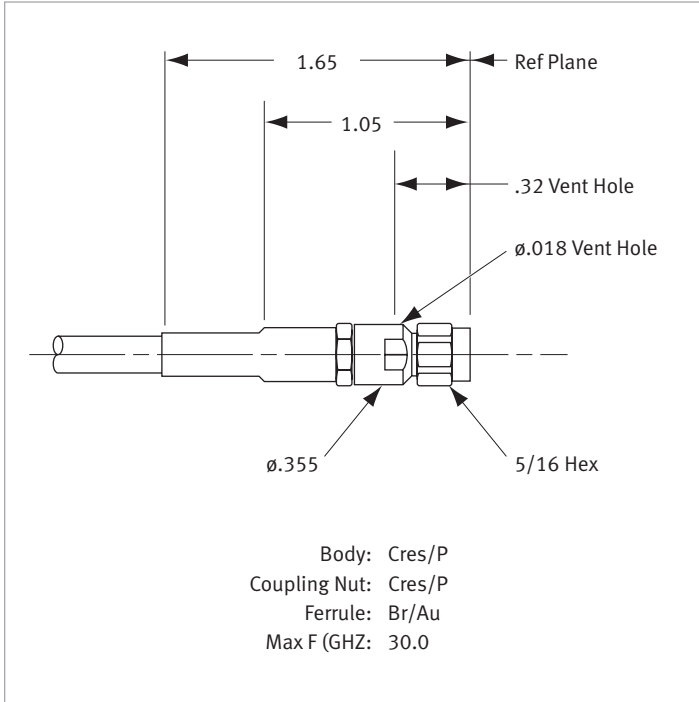
\*For higher frequency SMA connectors, contact GORE.



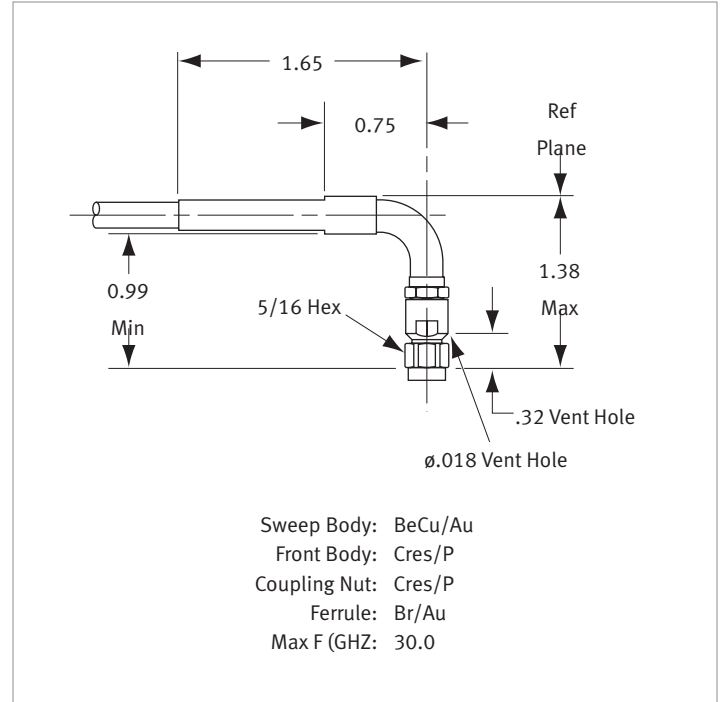
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ASSEMBLIES

## ZMQ



## ZMR



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