

# iCALIBER SMA Cable Assembly

DC - 18 GHz, 100 W @ 18 GHz



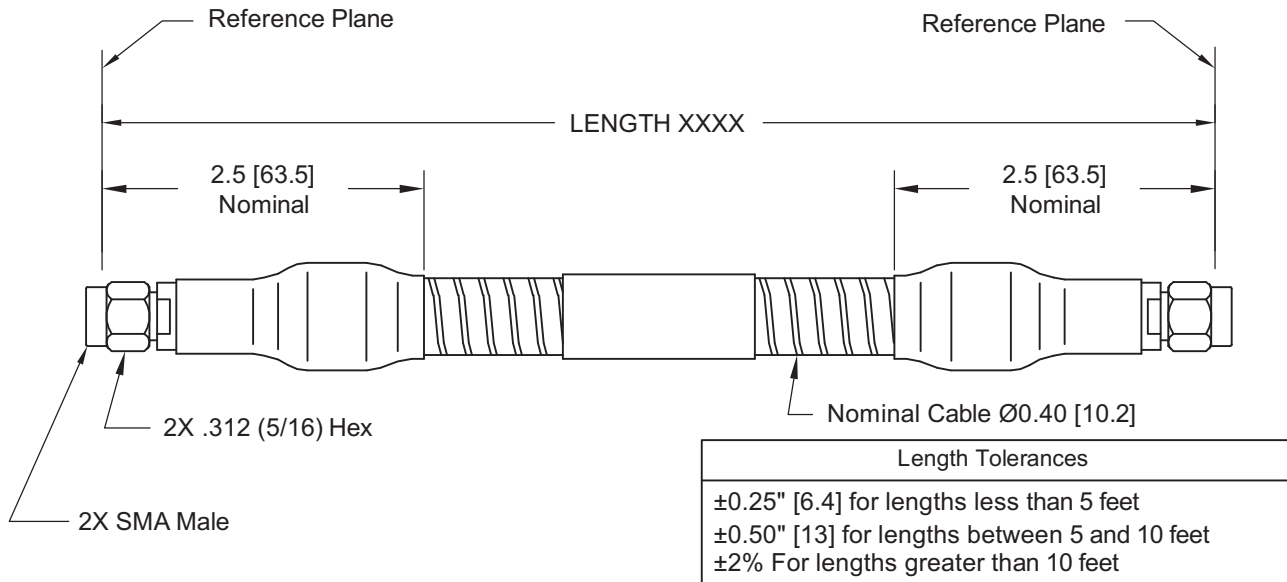
## SPECIFICATIONS:

Models: ICAL18-SM-XXXXY

<b>Electrical:</b>	
Frequency Range _____	DC - 18 GHz
Impedance _____	50 Ohms
Velocity of Propagation _____	77 %
Insulation Resistance _____	> 5000 M Ohm
Dielectric Withstanding Voltage _____	2500 V rms
Power Handling _____	100 Watts at 18 GHz
Temperature Range _____	-55°C to +105 °C
<b>Physical &amp; Mechanical:</b>	
Preferred Bending Radius _____	4.0 inch
Connector Retention Force _____	> 200 N
Connectors _____	Passivated Stainless Steel (Mates with SMA IAW MIL-STD-348A)
Center Conductors _____	Gold Plated Beryllium Copper
Armored Jacket _____	Passivated Stainless Steel
Insulators _____	PTFE

Frequency (GHz)	Return Loss (dB) Min	Cable Loss * (dB/ft) Nom
DC - 2.0	30	0.13
2.0 - 4.0	28	0.19
4.0 - 6.0	25	0.23
6.0 - 12.0	21	0.33
12.0 - 18.0	19	0.41

\*Cable Assembly Insertion Loss Calculation =  $L * [(0.0864 * \text{SQRT}(F)) + (0.00216 * F)] + (0.097 * \text{SQRT}(F))$   
 ( Where "F" = Frequency in GHz and "L" = Length in Feet )



## HOW TO ORDER:

Model Number: **ICAL18-SM-XXXXY**

Base Model Number  
 18 = 18 GHz  
 SM = SMA Male Connectors

Y = UNIT OF MEASURE  
 BLANK (Default) = INCHES  
 M = METERS  
 (HALF METER INCREMENTS)

XXXX = LENGTH

## Ordering Examples:

Standard Model Numbers:  
 ICAL18-SM-24 = 24 INCH CABLE  
 ICAL18-SM-36 = 36 INCH CABLE  
 ICAL18-SM-48 = 48 INCH CABLE

Model Number: ICAL18-SM-1.5M  
 1.5 METERS, 18 GHz, SMA MALE ASSY

Note: Dimensions in Brackets are Expressed in Millimeters and are for Reference Only.  
 Design specifications are subject to change without notice.  
 Contact factory for technical specifications before purchasing or use.

ICAL18-SM: REV C



Aeroflex / Inmet, Inc. • 300 Dino Drive, Ann Arbor, MI 48103 • U.S.A.  
 888-244-6638 or 734-426-5553 • FAX: 734-426-5557  
 www.aeroflex.com/inmet • inmet@aeroflex.com