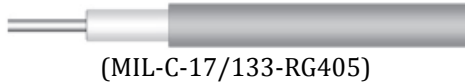


SEMI RIGID CABLE 0.086

(MIL-C-17/133-RG405)



Application:

RG405 is one of the most popular semi-rigid RG cables. RG405 will be preferred to flexible RG316 or RD316 for applications requiring high frequency range, low attenuation, high screening effectiveness, very small bending radius and/or no spring back effect.

CONSTRUCTION / DIMENSIONS			
	material	mm	inches
Center conductor	stranded SPCCS(1)	0.51	0.020
Dielectric	solid PTFE (2)	1.68	0.066
Inner shield	Copper tubing	2.20	0.087
Outer shield	-	-	-
Jacket black	-	-	-

(1) SPCCS= Silver Plated Copper Covered Steel
(2) PTFE = Polytetrafluoroethylene

ELECTRICAL CHARACTERISTICS	
characteristic impedance	50Ω ± 1.5Ω
operating frequency range	DC – 20 GHz
shielding effectiveness	110 dB
voltage withstanding	5 000 V rms
peak power	1.9 kW
capacitance	100pF / m 30 pF / ft
velocity of propagation	70 % (4.8 ns / m)

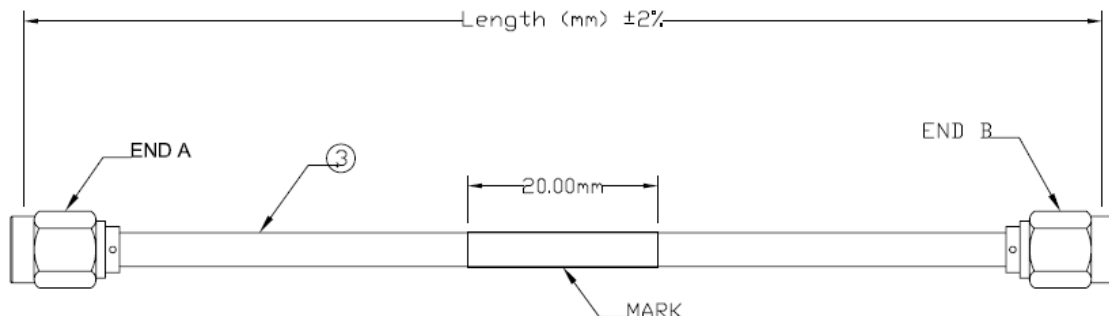
Note: typical VSWR for the cable assembly
VSWR=1.2:1

MECHANICAL CHARACTERISTICS		
recommended minimum bending radius	3.17 mm inch	0.125
weight	20 g / m	0.0135 lbs / ft

FREQUENCY / ATTENUATION / 20 °C			
MAX POWER (sea level / 40 °C)			
GHz	dB/ m	dB / ft	Watts
1.0	0.65	0.20	100
2.0	0.94	0.29	71
3.0	1.18	0.35	58
6.0	1.73	0.53	41
8.0	2.05	0.62	35
10	2.33	0.71	32
12.4	2.64	0.80	28
18	3.31	1.10	24
20	3.53	1.07	22
attenuation calculation (dB/m)	(0.61 x √f GHz) + (0.04 x f GHz)		
power calculation (W)	100 / √f GHz		

Note: typical attenuation for a couple of connectors
(dB) = 0.075 x √f (GHz)


ENVIRONMENTAL CHARACTERISTICS		
operating temperature range	-40 / +125 °C	-40 / +257 °F
fire resistance	Not applicable	
halogen free	no	



- TYPE COAX CABLE
- CONNECTOR ON END A
- CONNECTOR ON END B
- LENGTH: Standard = overall length (or please specify if length between references planes)
 - length tolerance (standard = ±2%)

SEMI-RIGID CABLE 0.086 ASSEMBLIES

(MIL-C-17/133-RG405)

SEMI-RIGID CABLE RG 405 ASSEMBLES				
SKU	Model	End A - Connector	End B - Connector	Photo
00-0255	SMA male to SMA male RG405-X.XX(M)	SMA male straight	SMA male straight	
CUSTOM	End A to End B RG316- XX.XX(M)	End A - Connector	End B - Connector	

CONNECTORS FOR SEMI-RIGID CABLE 0.086

(MIL-C-17/133-RG405)

CONNECTOR SELECTION (FOR RG405 CABLE)					
SKU	Connector Type Series	Interface	Frequency (GHz)	Impedance (Ω)	Classic level (Mil Spec)
01-0446	SMA	Male Straight, SS	18	50	Mil-Spec
	SMA	Male Right Angle, SS	12	50	Mil-Spec
01-344	N	Male straight	18	50	Mil-spec