

# RG Cables

## Cable Feature:

Flexibility	Good/Very Good
Cost	Medium/Low
Attenuation	Medium
Power Handling	Medium/High
Temperature	Medium
Connector Availability	Medium



	RG-393	RG-217	RG-177	RG-218	RG-220
<b>AA Drawing Number</b>	AA-3420	AA-3410	AA-3404	AA-3411	AA-6002
<b>Part Number</b>	51509	41511	41506	41512	41579
<b>Physical Specifications</b>					
Description	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
Center Conductor	SC	BC	BC	BC	BC
	0.094 (2.39)	0.106 (2.69)	0.195 (4.95)	0.195 (4.95)	0.260 (6.60)
Dielectric	PTFE	PE	PE	PE	PE
	0.285 (7.24)	0.370 (9.40)	0.680 (17.27)	0.680 (17.27)	0.910 (23.11)
Inner Shield	SC	BC	SC	BC	BC
	0.295 (7.49)	0.403 (10.24)	0.709 (18.01)	0.726 (18.44)	0.956 (24.28)
Interlayer	/	/	/	/	/
Outer Shield	SC	BC	SC	/	/
	0.330 (8.38)	0.436 (11.07)	0.738 (18.75)		
Jacket	FEP	PVC	PVC	PVC	PVC
	0.390 (9.91)	0.545 (13.84)	0.895 (22.73)	0.870 (22.10)	1.120 (28.45)
<b>Mechanical Specifications</b>					
Bend Radius	2.0 (50.8)	5.5 (139.7)	9.0 (228.6)	9.0 (228.6)	12.0 (304.8)
Weight	0.175 lb/ft	0.230 lb/ft	0.470 lb/ft	0.460 lb/ft	0.820 lb/ft
Operating Temperature Range	-55/+200 °C	-40/+80 °C	-40/+80 °C	-40/+80 °C	-40/+80 °C
<b>Electrical Specifications</b>					
Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Shielding Effectiveness	60 dB	60 dB	60 dB	40 dB	40 dB
Dielectric Constant	1.98	2.3	2.3	2.3	2.3
Velocity of Propagation	0.71	0.659	0.659	0.659	0.659
Capacitance	28.6pF/ft	30.8pF/ft	30.8pF/ft	30.8pF/ft	30.8pF/ft
DC Voltage (kV)	1.9	5.8	8	8	10.5
<b>Attenuation: dB/100ft (100m) (+25°C Ambient; Sea Level)</b>					
13.56 MHz	0.76 (2.48)	0.61 (1.99)	0.35 (1.14)	0.35 (1.14)	0.24 (0.79)
50 MHz	1.48 (4.86)	1.19 (3.90)	0.71 (2.31)	0.71 (2.31)	0.50 (1.63)
100 MHz	2.13 (6.99)	1.71 (5.60)	1.05 (3.43)	1.05 (3.43)	0.74 (2.43)
1000 MHz	7.64 (25.05)	5.97 (19.59)	4.46 (14.63)	4.46 (14.63)	3.23 (10.60)
1500 MHz	9.71 (31.85)	7.55 (24.75)	5.93 (19.44)	5.93 (19.44)	4.32 (14.16)
2000 MHz	11.56 (37.92)	8.94 (29.32)	7.30 (23.93)	7.30 (23.93)	5.33 (17.49)
2500 MHz	13.27 (43.53)	10.22 (33.51)	8.60 (28.22)	8.60 (28.22)	6.30 (20.68)
3000 MHz	14.88 (48.80)	11.41 (37.43)	9.86 (32.35)	9.86 (32.35)	7.25 (23.77)
K1	0.200407	0.162200	0.087800	0.087800	0.061105
K2	0.001300	0.000842	0.001685	0.001685	0.001300
<b>Power (Watts) (+25°C Ambient; Sea Level)</b>					
13.56 MHz	19909	7230	16686	16888	28800
50 MHz	10158	3704	8196	8295	14061
100 MHz	7060	2582	5525	5592	9434
1000 MHz	1985	741	1302	1317	2168
1500 MHz	1564	588	981	993	1625
2000 MHz	1317	497	799	808	1317
2500 MHz	1149	435	678	687	1115
3000 MHz	1027	390	593	600	971

\* SC = Silver Plated Copper

\* BC = Bare Copper