



160 SERIES

OPERATING UP TO 34 GHz



Center Conductor
Silver Plated Copper
1601/1603 Solid
1606/1608 Stranded

Dielectric
EPTFE

Foil
Silver Plated
Copper

Braid
Silver Plated
Copper

Inner Jacket
FEP
(0.160", 4.8mm)

Serving
SCCS Armor

Outer Jacket
FEP
(0.218", 5.5mm)

CABLE SPECIFICATIONS

	1601	1606	1603	1608
ELECTRICAL CHARACTERISTICS				
Impedance	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω	50 +/- 2Ω
Cut Off Frequency (cable only, max)	34 GHz	34 GHz	34 GHz	34 GHz
Capacitance	28.6 pF/ft.	28.6 pF/ft.	28.6 pF/ft.	28.6 pF/ft.
Velocity of Propagation	71%	71%	71%	71%
Time Delay	1.43 ns/ft.	1.43 ns/ft.	1.43 ns/ft.	1.43 ns/ft.
Shielding Effectiveness up to 18GHz	>90 dB	>90 dB	>90 dB	>90 dB
Cable Attenuation Factors (K1, K2) *	10.9, 0.89	12.2, 0.89	10.9, 0.89	12.2, 0.89
Power Handling	See Chart	See Chart	See Chart	See Chart
MECHANICAL CHARACTERISTICS				
Weight	.5 oz/ft (46 g/m)	.5 oz/ft (46 g/m)	1.0 oz/ft (97 g/m)	.98 oz/ft (92 g/m)
Static Bend Radius	0.375" (9.52 mm)	0.375" (9.52 mm)	0.675" (17.14mm)	0.625" (15.87mm)
Dynamic Bend Radius	1.0"(25.4mm)	1.0" (25.4mm)	1.5" (38.1mm)	1.5" (38.1 mm)
ENVIRONMENTAL CHARACTERISTICS				
Operating Temperature Range ¹	-65°C to +200°C	-65°C to +200°C	-65°C to +200°C	-65°C to +200°C
RoHS 3 (EU 2015/863)	Yes	Yes	Yes	Yes

¹ Standard cable assembly temperature range is -55°C to +165°C, -65°C to +200°C available for select configurations

VSWR for assemblies with
two straight connectors

1.35:1 to 18 GHz

1.35:1 to 18 GHz

1.35:1 to 18 GHz

1.35:1 to 18 GHz

VSWR for assemblies with one straight
and one right angle connector

1.40:1 to 18 GHz

1.40:1 to 18 GHz

1.40:1 to 18 GHz

1.40:1 to 18 GHz

VSWR for assemblies with
two right angle connectors

1.45:1 to 18 GHz

1.45:1 to 18 GHz

1.45:1 to 18 GHz

1.45:1 to 18 GHz

*Attenuation = $K1\sqrt{f} + K2f$ (cable only)

1601 is a flexible replacement for RG402 cable



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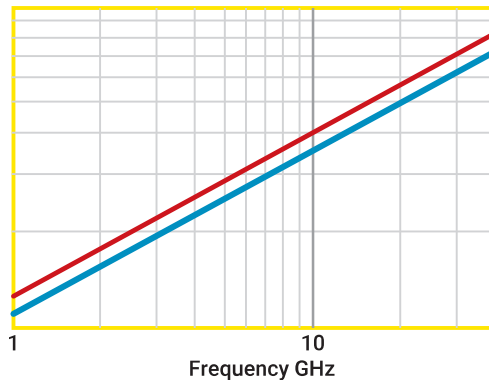
CABLE ATTENUATION

ATTENUATION (MAX)

1601/1603				1606/1608		
GHz	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level	dB/ft.	dB/m	Power(W) @ 20°C @ Sea Level
0.5	0.08	0.27	707	0.09	0.30	632
1	0.12	0.39	500	0.13	0.43	446
2	0.17	0.56	350	0.19	0.62	313
4	0.25	0.83	240	0.28	0.92	214
6	0.32	1.05	190	0.35	1.16	170
8	0.38	1.25	160	0.42	1.37	143
10	0.43	1.42	150	0.47	1.56	134
12	0.48	1.59	140	0.53	1.74	125
14	0.53	1.75	130	0.58	1.91	116
16	0.58	1.90	120	0.63	2.07	107
18	0.62	2.04	110	0.68	2.22	98
20	0.64	2.11	100	0.72	2.36	89
22	0.68	2.25	90	0.77	2.52	80
24	0.73	2.38	80	0.81	2.66	71
26	0.77	2.51	70	0.86	2.81	63
28	0.80	2.64	60	0.90	2.95	54
30	0.84	2.76	50	0.94	3.09	45
32	0.88	2.89	40	0.99	3.23	36

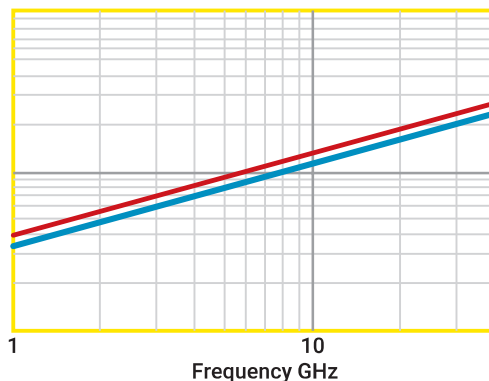
dB/ft
1.00
0.10

ATTENUATION



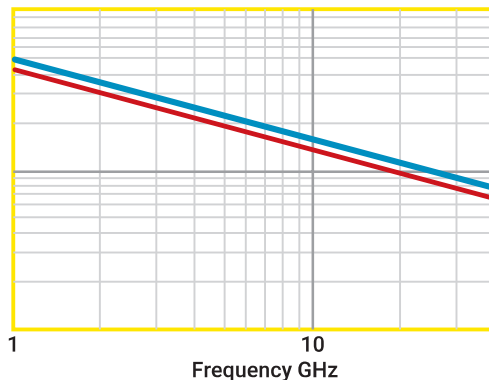
dB/m
10.00
1.00
0.10

ATTENUATION



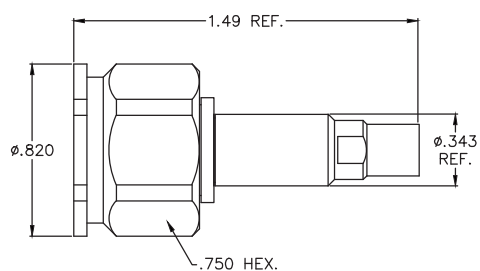
Watts
1000
100
10

MAX RF POWER AT 20°C AT SEA LEVEL

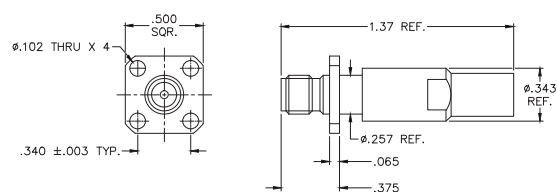




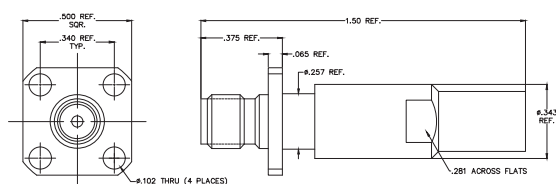
CONNECTORS FOR 160 SERIES



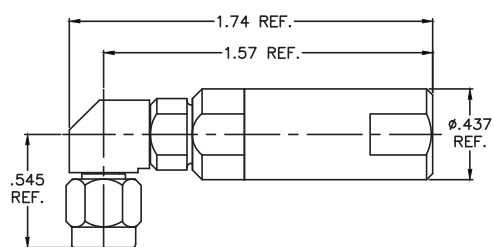
N-TYPE MALE (NPS-1601)



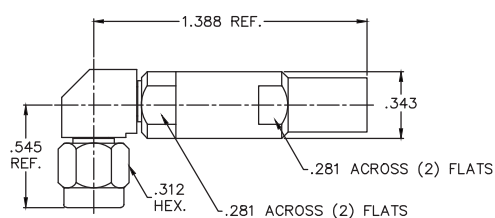
**SMA FEMALE, 4-HOLE
FLANGE MOUNT (SJP4-1601)**



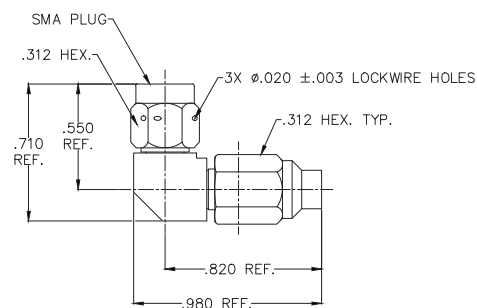
**SMA FEMALE, 4-HOLE
FLANGE MOUNT (SJP4-1603)**



**SMA MALE RIGHT ANGLE FOR
EXTERNAL ARMOR (SPRC-1601A)**



SMA MALE RIGHT ANGLE (SPRC-1603)



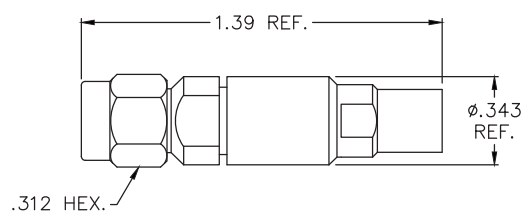
**SMA MALE RIGHT ANGLE W/LOCK
WIRE HOLES (SPRCW-1601)**

Other connector types and styles are available, please contact the factory

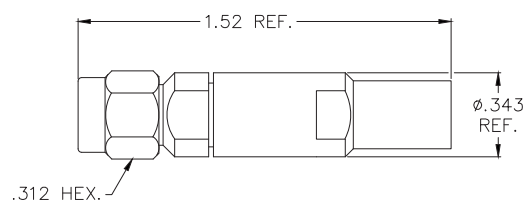


CONNECTORS FOR 160 SERIES

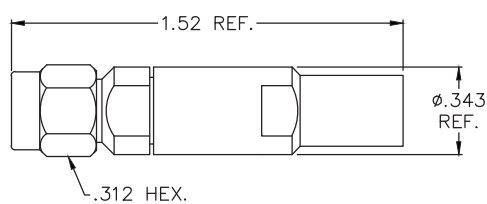
160 SERIES



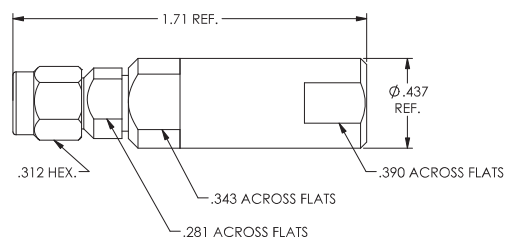
SMA MALE (SPS-1601)



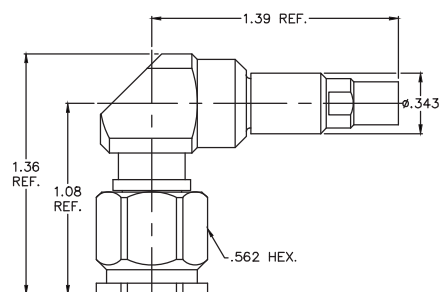
SMA MALE FOR LC JACKET (SPS-1601)



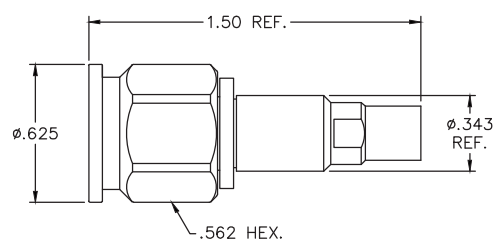
SMA MALE (SPS-1603)



SMA MALE FOR LC JACKET (SPS-1603)



TNC MALE RIGHT ANGLE (TPR-1601)



TNC MALE (TPS-1601)

Other connector types and styles are available, please contact the factory