



# Coaxial Components

## 2WAY - 4WAY - 8WAY POWER DIVIDERS & COMBINERS

Stripline Construction  
Connectors SMA and Type N  
Compact and Lightweight  
RF Power 30 Watt with all ports matched



OCTAVE BAND - 2 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.5-1.0	22	1.25	1.15	0.40	O212	O222
1.0-2.0	20	1.25	1.15	0.35	O213	O223
2.0-4.0	20	1.30	1.20	0.40	O214	O224
4.0-8.0	20	1.35	1.25	0.50	O215	O225
8.0-12.4	20	1.35	1.30	0.50	O216	O225
12.0-18.0	19	1.40	1.35	0.60	O217	O225
6.0-18.0	19	1.40	1.35	0.60	O215H	O225

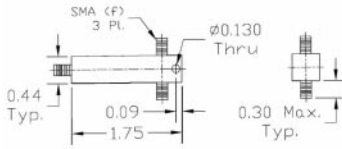
MULTIBAND MODELS 2 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.5-4.0	20	1.3	1.2	0.50	M212E	M225
0.8-2.4	20	1.25	1.2	0.35	M212D	M225
2.0-8.0	20	1.35	1.35	0.40	MP214F	M225
2.0-18.0	18	1.4	1.4	1.00	M214H	M225
6.0-18	19	1.4	1.35	0.60	M215H	M225

SATCOM & SPECIAL BAND 2 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.85-1.65	22	1.25	1.20	0.40	S213L	S223L
3.65-6.5	20	1.35	1.25	0.40	S215C	S225C
3.65-4.3	22	1.25	1.20	0.40	S215C1	S225C1
5.85-6.5	22	1.25	1.20	0.40	S215C2	S225C2
7.2-8.4	20	1.35	1.30	0.50	S215X	S225X
7.2-7.75	20	1.30	1.30	0.50	S215X1	S225X1
7.9-8.4	20	1.30	1.30	0.50	S215X2	S225X2
10.7-12.7	20	1.40	1.35	0.60	S216X-1	S226X-1
10.7-14.5	18	1.45	1.40	0.60	S216K-1	S226K-1
13.7-14.5	20	1.40	1.35	0.60	S217K-1	S227K-1
13.5-21.5	15	1.70	1.70	0.60	S218	N/A

## ULTRA WIDE BAND 2 WAY MODELS



Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.5-18	Specs In Table Below				—	UWB223HT
0.5-20	Specs In Table Below				UWB213HT	N/A

ULTRA WIDE BAND 2 WAY MODELS SPECS

Freq. Range (GHz)	Insertion Loss (dB Max)	Isolation (dB Min.)	VSWR In (Max.)	VSWR Out (Max.)	Phase Balance (Deg. Max)	Amplitude Balance (dB Max)	Input Power (W Max.)
0.5-1	0.70	6	2.00:1	2.00:1	1	0.20	10
1-1.5	0.50	10	1.70:1	1.50:1	1	0.20	10
1.5-2	0.50	15	1.60:1	1.40:1	1	0.20	10
2-4	0.40	20	1.50:1	1.30:1	1	0.20	10
4-8	0.50	17	1.50:1	1.40:1	1.5	0.20	10
8-15	0.80	15	1.70:1	1.50:1	2	0.30	10
15-16	0.80	15	1.70:1	1.60:1	3	0.30	10
16-18	0.90	14	1.80:1	1.90:1	4	0.40	10
18-20	1.10	7	2.00:1	2.00:1	4	0.40	10

## LINE STRETCHERS

50 Ohms  
SMA M/F  
0.5 Inch Travel  
Locking Device Included

Model No. (SMA)	Freq. (GHz)	Phase Adjust (min)	I.L. (dB max)	VSWR (max)
LS1903	DC-2.3	15°/GHz	0.5	1.5
LS1904	DC-4.3	15°/GHz	0.5	1.5
LS1905	DC-8.2	15°/GHz	0.6	1.5
LS1906	DC-12.7	15°/GHz	0.7	1.5
LS1907	DC-18.6	15°/GHz	1.0	1.6

OCTAVE & WIDE BAND 4 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.5-1.0	22	1.45	1.30	0.90	O412	O422
1.0-2.0	20	1.40	1.25	0.80	O413	O423
2.0-4.0	20	1.35	1.35	0.60	O414	O424
4.0-8.0	20	1.45	1.35	0.60	O415	O425
8.0-12.4	18	1.45	1.35	0.80	O416	**
12.0-18.0	18	1.50	1.40	0.90	O417	**
0.5-4.0	15	1.50	1.40	1.00	O412E	**
2.0-18.0	15	1.60	1.40	2.00	O414H	**
6.0-18.0	18	1.60	1.40	0.90	O415H	**

SATCOM & SPECIAL BAND 4 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.85-1.65	22	1.25	1.20	0.40	S413L	S423L
3.65-6.5	20	1.35	1.25	0.40	S415C	S425C
3.65-4.3	22	1.25	1.20	0.40	S415C1	S425C1
5.85-6.5	22	1.25	1.20	0.40	S415C2	S425C2
7.2-8.4	20	1.35	1.30	0.50	S415X	S425X
7.2-7.75	20	1.30	1.30	0.50	S415X1	S425X1
7.9-8.4	20	1.30	1.30	0.50	S415X2	S425X2
10.7-12.7	20	1.40	1.35	0.60	S416X-1	S426X-1
10.7-14.5	18	1.45	1.40	0.60	S416K-1	S426K-1
13.7-14.5	20	1.40	1.35	0.60	S417K-1	S427K-1

OCTAVE & WIDE BAND 8 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.5-1.0	18	1.45	1.30	0.90	O81-0.5	O81-0.5N
1.0-2.0	18	1.45	1.35	0.80	O82-1	O82-1N
2.0-4.0	18	1.45	1.35	0.80	O84-2	O84-2N
4.0-8.0	17	1.45	1.40	1.0	O88-4	O88-4N
8.0-12.4	16	1.60	1.50	1.4	O812.4-8	O812-8N
12.0-18.0	15	1.60	1.50	2.0	O818-12	O818-12N
8.0-18.0	15	1.60	1.50	2.0	O818-8	O818-8N

SATCOM & SPECIAL BAND 8 WAY MODELS

Freq (GHz)	Isolation (dB min)	VSWR Max* In	VSWR Max* Out	Insertion Loss (dB)	Model No. (SMA)	Model No. (Type N)
0.85-1.65	18	1.45	1.40	0.8	S813L	S823L
3.65-6.5	17	1.45	1.45	0.8	S815C	S825C
3.65-4.3	18	1.40	1.40	0.8	S815C1	S825C1
5.85-6.5	18	1.45	1.40	0.8	S815C2	S825C2
7.2-8.4	16	1.45	1.40	0.9	S815X	S825X
7.2-7.75	16	1.45	1.40	0.9	S815X1	S825X1
7.9-8.4	16	1.45	1.40	0.9	S815X2	S825X2
10.7-12.7	17	1.45	1.40	1.0	S816X-1	S826X-1
10.7-14.5	17	1.45	1.40	1.0	S816K-1	S826K-1
13.7-14.5	17	1.45	1.40	1.0	S817K-1	S827K-1

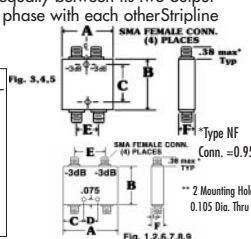
\* Type N Models are .05 higher in VSWR than SMA Models  
\*\* Type N Units available in narrower bands

## 90° HYBRID 3dB

The Hybrid Directional Coupler splits power equally between its two output ports. The two outputs are 90 degrees out of phase with each other. Stripline in aluminum housing

Connectors: SMA, or Type N, 4 ports

Figure	A	B	C	D	E	F
1	3.06	0.50	0.84	1.370	2.56	0.38
2	1.78	0.50	0.64	0.500	1.28	0.38
3	1.15	0.50	0.314	0.58	0.66	0.38
4	1.00	0.50	0.314	0.50	0.50	0.38
5	1.00	0.58	0.392	0.50	0.50	0.38
6	8.50	0.72	0.65	7.20	8.00	0.50
7	6.50	0.72	0.65	5.20	6.00	0.50
8	2.60	0.75	0.67	1.260	2.03	0.44
9	1.72	0.60	0.61	0.500	1.22	0.50



OCTAVE BAND MODELS

RF Power 50W Avg 2kW peak

Freq (GHz)	VSWR (max)	ISO (dB min)	Coupling Limits (dB)	Model No. (SMA)	Model No. (Type N)	Figure
0.5-1.0	1.10	28	3.1±0.6	OHS1-0.5	OHN1-0.5	1
1.0-2.0	1.10	28	3.1±0.6	OHS2-1	OHN2-1	2
2.0-4.0	1.20	22	3.1±0.6	OHS4-2	OHN4-2	3
2.6-5.2	1.25	20	3.1±0.6	OHS5.2-2.6	OHN5.2-2.6	4
4.0-8.0	1.25	18	3.2±0.7	OHS8-4	OHN8-4	4
6.0-12.4	1.30	18	3.2±0.7	OHS12.4-6	OHN12.4-6	4
7.6-16.0	1.40	15	3.4±0.9	OHS16-7.6	OHN16-7.6	5
12.0-18.0	1.45	15	3.4±1.0	OHS18-12	OHN18-12	5

BROADBAND MODELS

RF Power 30W Avg 2kW peak

Freq (GHz)	VSWR (max)	ISO (dB min)	Coupling Limits (dB)	Model No. (SMA)	Model No. (Type N)	Figure
0.5-2.0	1.30	15	3.3±0.8	BHS2-0.5	BHN2-0.5	6
0.8-2.5	1.30	15	3.3±0.8	BHS2.5-0.8	BHN2.5-0.8	7
2.0-8.0	1.30	17	3.3±0.8	BHS8-2	BHN8-2	8
4.0-12.4	1.35	17	3.3±0.8	BHS12.4-4	BHN12.4-4	9
7.0-18.0	1.50	13	3.4±1.0	BHS18-7	BHN18-7	9

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