

See ATM
Website for
More Models
and

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

- Stripline Construction
- Connectors SMA and Type N
- Compact and Lightweight
- RF Power 30 Watt with all ports matched
- Models to 40 GHz



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	P212	P222
1.0-2.0	20	1.25	1.15	0.35	P213	P223
2.0-4.0	20	1.30	1.20	0.40	P214	P224
4.0-8.0	20	1.35	1.25	0.50	P215	P225
8.0-12.4	20	1.35	1.30	0.50	P216	**
12.0-18.0	19	1.40	1.35	0.60	P217	**
14.0-21.0	15	1.70	1.70	0.60	P218	**

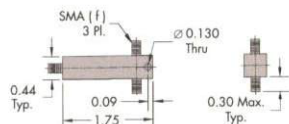
MULTIBAND MODELS 2 WAY MODELS

0.5-4.0	20	1.3	1.2	0.50	P212E	**
0.8-2.4	20	1.25	1.2	0.35	P212D	P222D
2.0-8.0	20	1.35	1.35	0.40	P214F	P224F
1.0-18.0	18	1.4	1.4	1.00	P213H	**
6.0-18	19	1.4	1.35	0.60	P215H	P225H
2.0-26.5	19	1.4	1.35	1.10	P2K8	**

SATCOM & SPECIAL BAND 2 WAY MODELS

0.85-1.65	22	1.25	1.20	0.40	P213L	P223L
3.65-6.5	20	1.35	1.25	0.40	P215C	P225C
3.65-4.3	22	1.25	1.20	0.40	P215C1	P225C1
5.85-6.5	22	1.25	1.20	0.40	P215C2	P225C2
7.2-8.4	20	1.35	1.30	0.50	P215X	P225X
7.2-7.75	20	1.30	1.30	0.50	P215X1	P225X1
7.9-8.4	20	1.30	1.30	0.50	P215X2	P225X2
10.7-12.7	20	1.40	1.35	0.60	P216X-1	P226X-1
10.7-14.5	18	1.45	1.40	0.60	P216K-1	P226K-1
13.7-14.5	20	1.40	1.35	0.60	P217K-1	P227K-1

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			—	P223HT
0.5-20		Specs In Table Below			P213HT	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

SPECIAL 10.0 - 40.0 GHz 2 WAY MULTI - BAND UNIT

Model (No.)	Freq. (GHz)	Isolation (dB Min.)	VSWR Max (In)	VSWR Max (Out.)	Isolation (dB Min.)	Amplitude Balance (+/- dB)	Phase Balance (+/- deg)
P2K9A	10.0-18.0	18	1.6	1.5	1.5	0.6	6.0
	18.0-40.0	18	1.6	1.5	2.1	0.6	6.0



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	P412	P422
1.0-2.0	20	1.40	1.25	0.80	P413	P423
2.0-4.0	20	1.35	1.35	0.60	P414	P424
4.0-8.0	20	1.45	1.35	0.60	P415	P425
7.0-12.4	18	1.45	1.35	0.80	P416	**
12.0-18.0	18	1.50	1.40	0.90	P417	**
0.5-4.0	15	1.50	1.40	1.00	P412E	**
2.0-8.0	15	1.60	1.40	2.00	P414F	P424F
2.0-18.0	15	1.60	1.40	2.00	P414H	**
6.0-18.0	18	1.60	1.40	0.90	P415H	**
14.0-21.0	16	1.60	1.60	1.50	P418	**

SATCOM & SPECIAL BAND 4 WAY MODELS

0.85-1.65	22	1.25	1.20	0.40	P413L	P423L
3.65-6.5	20	1.35	1.25	0.40	P415C	P425C
3.65-4.3	22	1.25	1.20	0.40	P415C1	P425C1
5.85-6.5	22	1.25	1.20	0.40	P415C2	P425C2
7.2-8.4	20	1.35	1.30	0.50	P415X	P425X
7.2-7.75	20	1.30	1.30	0.50	P415X1	P425X1
7.9-8.4	20	1.30	1.30	0.50	P415X2	P425X2
10.7-12.7	20	1.40	1.35	0.60	P416X-1	P426X-1
10.7-14.5	18	1.45	1.40	0.60	P416K-1	P426K-1
13.7-14.5	20	1.40	1.35	0.60	P417K-1	P427K-1
5.7-18.5	12	1.70	1.60	2.00	P415CJ	**

OCTAVE & WIDE BAND 8 WAY MODELS

0.5-1.0	18	1.45	1.30	0.90	P812	P822
1.0-2.0	18	1.45	1.35	0.80	P813	P823
2.0-4.0	18	1.45	1.35	0.80	P814	P824
4.0-8.0	17	1.45	1.40	1.0	P815	P825
8.0-12.4	16	1.60	1.50	1.4	P816	**
12.0-18.0	15	1.60	1.50	2.0	P817	**
2.0-18.0	13	1.70	1.70	3.0	P814H	**

SATCOM & SPECIAL BAND 8 WAY MODELS

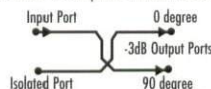
0.85-1.65	18	1.45	1.40	0.8	P813L	P823L
3.65-6.5	17	1.45	1.45	0.8	P815C	P825C
3.65-4.3	18	1.40	1.40	0.8	P815C1	P825C1
5.85-6.5	18	1.45	1.40	0.8	P815C2	P825C2
7.2-8.4	16	1.45	1.40	0.9	P815X	P825X
7.2-7.75	16	1.45	1.40	0.9	P815X1	P825X1
7.9-8.4	16	1.45	1.40	0.9	P815X2	P825X2
10.7-12.7	17	1.45	1.40	1.0	P816X-1	P826X-1
10.7-14.5	17	1.45	1.40	1.0	P816K-1	P826K-1
13.7-14.5	17	1.45	1.40	1.0	P817K-1	P827K-1

* Type N Models are .05 higher in VSWR than SMA Models

** Type N Units available in narrower bands

90° HYBRID 3dB COUPLERS

- The Hybrid Directional Coupler splits power equally between its two output ports
- Two output ports are 90° out of phase with each other
- Construction is stripline in an aluminum housing



Phase Balance
RF Conn: Typically: $\pm 5^\circ$
SMA Female or Type N Female- 4 ports



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)
0.2-1.0	1.20	20	3.2 $\pm$ 0.6	H911C	H921C
0.5-1.0	1.10	28	3.1 $\pm$ 0.6	H912	H922
1.0-2.0	1.10	28	3.1 $\pm$ 0.6	H913	H923
2.0-4.0	1.20	22	3.1 $\pm$ 0.6	H914	N/A
2.6-5.2	1.25	20	3.1 $\pm$ 0.6	H914K	N/A
4.0-8.0	1.25	18	3.2 $\pm$ 0.7	H915	N/A
6.0-12.4	1.30	18	3.2 $\pm$ 0.7	H916	N/A
7.5-16.0	1.40	15	3.4 $\pm$ 0.9	H916H	N/A
12.0-18.0	1.45	15	3.4 $\pm$ 1.0	H917	N/A

BROADBAND MODELS

RF Power 30W Avg 2kW peak

0.5-2.0	1.30	15	3.3 $\pm$ 0.8	H912D	H922D
0.8-2.5	1.30	15	3.3 $\pm$ 0.8	H912E	H922E
2.0-8.0	1.30	17	3.3 $\pm$ 0.8	H914F	H924F
4.0-12.4	1.35	17	3.3 $\pm$ 0.8	H915G	H925G
7.0-18.0	1.50	13	3.4 $\pm$ 1.0	H915H	H925H