

PHASE SHIFTERS



THROUGH HOLE MODELS

INPUT FREQUENCY (MHz)	INPUT POWER (dBm) MAX	INSERTION LOSS (dB)		PHASE SHIFT RANGE (Degrees) MIN	CONTROL VOLTAGE (Vdc)	CONTROL BANDWIDTH (KHz) MIN	VSWR MAX	PACKAGE	PIN-OUT (See Below)	MODEL
		TYP	MAX							
5.7 - 6.3	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-900
10 - 20	-10	2.0	3.5	0 to 180	0 to +24	DC - 50	1.7:1	124	1	PP-921
19 - 21	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-909
20 - 40	-10	2.5	4.0	0 to 180	0 to +15	DC - 50	2.0:1	124	1	PP-924
24 - 48	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-925
28.5 - 31.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-901
35 - 60	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-926
38 - 42	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-920
40 - 80	-10	1.5	2.0	0 to 180	0 to +24	DC - 50	2.0:1	124	1	PP-927
47.5 - 52.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-908
57 - 63	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-902
66.5 - 73.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-904
80 - 160	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-922
100 - 200	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-923
106.5 - 119.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-905
133 - 147	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-906
152 - 168	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124	1	PP-907
870 - 900	-10	1.5	2.0	0 to 50	0 to +10	DC - 50	1.7:1	124	1	PP-919



FLAT PACK MODELS

INPUT FREQUENCY (MHz)	INPUT POWER (dBm) MAX	INSERTION LOSS (dB)		PHASE SHIFT RANGE (Degrees) MIN	CONTROL VOLTAGE (Vdc)	CONTROL BANDWIDTH (KHz) MIN	VSWR MAX	PACKAGE	PIN-OUT (See Below)	MODEL
		TYP	MAX							
19 - 21	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-109
28.5 - 31.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-101
38 - 42	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-120
57 - 63	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-102
66.5 - 73.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-104
80 - 160	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-122
100 - 200	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-123
106.5 - 119.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-105
133 - 147	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-106
152 - 168	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	115	2	PF-107

Note: Nominal impedance is 50 Ohms.

PIN-OUT TABLE

	INPUT	OUTPUT	CONTROL	CASE GROUND
#1	1	13	4	All Other
#2	14	7	1,8	All Other

For pin location and package outline drawings, see back pages.

PHASE SHIFTERS

SURFACE-MOUNT MODELS



INPUT FREQUENCY (MHz)	INPUT POWER (dBm) MAX	INSERTION LOSS (dB)		PHASE SHIFT RANGE (Degrees) MIN	CONTROL VOLTAGE (Vdc)	CONTROL BANDWIDTH (KHz) MIN	VSWR MAX	PACKAGE	PIN-OUT (See Below)	MODEL
		TYP	MAX							
19 - 21	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-909
28.5 - 31.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	102S	4	PS-901
38 - 42	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-920
57 - 63	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-902
66.5 - 73.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-904
80 - 160	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-922
100 - 200	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-923
106.5 - 119.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-905
133 - 147	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-906
152 - 168	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	124S	1	PS-907
1800 - 2200	-10	1.5	2.0	0 to 150	0 to +20	DC - 50	1.7:1	133	3	SPS-1900



COAXIAL CONNECTOR MODELS

INPUT FREQUENCY (MHz)	INPUT POWER (dBm) MAX	INSERTION LOSS (dB)		PHASE SHIFT RANGE (Degrees) MIN	CONTROL VOLTAGE (Vdc)	CONTROL BANDWIDTH (KHz) MIN	VSWR MAX	PACKAGE	PIN-OUT (See Below)	MODEL
		TYP	MAX							
2.375 - 2.625	-10	1.2	2.0	0 to 180	0 to +30	DC - 50	1.5:1	110	2	PK-710*
4.75 - 5.25	-10	1.2	2.0	0 to 180	0 to +30	DC - 50	1.5:1	110	2	PK-711*
19 - 21	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-709*
28.5 - 31.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-701*
35 - 70	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-712*
38 - 42	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-720*
57 - 63	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-702*
66.5 - 73.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-704*
80 - 160	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-722*
100 - 200	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-723*
106.5 - 119.5	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-705*
133 - 147	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-706*
152 - 168	-10	1.2	1.5	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-707*
190 - 210	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.7:1	110	2	PK-714*
500	-10	1.5	2.0	0 to 180	0 to +30	DC - 50	1.8:1	110	2	PK-715*

*Select female connector suffix: S=SMA, B=BNC, N=Type N, T=TNC.

Note: Nominal impedance is 50 Ohms.

PIN-OUT TABLE

	INPUT	OUTPUT	CONTROL	CASE GND
#1	1	13	4	All Other
#2	1	3	2	All Other
#3	1	2	3	All Other
#4	1	2	7	All Other

For pin location and package outline drawings, see back pages.

