

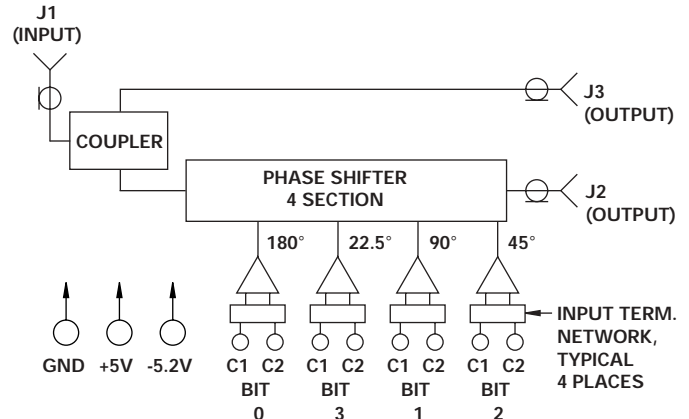
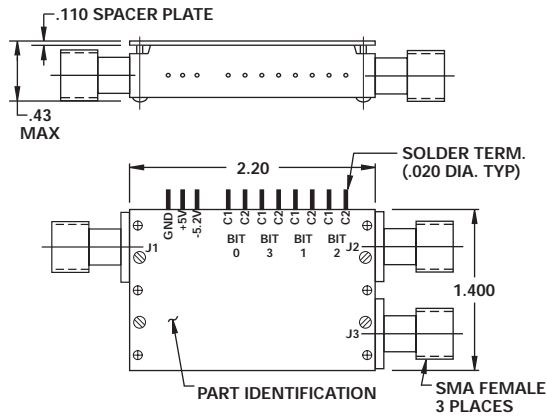
## FEATURES

- 1300 - 1900 MHz
- 22.5° LSB, 337.5° Range
- Integrated Coupler for REF Channel
- +45 dBm 3rd Order Intercept
- ECL Driver
- Replaceable SMA Connector



MODEL NO.  
CDP0815

## PHASE SHIFTER, 4 SECTION



### LOGIC TABLE

Control Logic				Phase State	Normal Phase Shift (DEG)
C0	C1	C2	C3		
0	0	0	0	PS0	0
0	0	0	1	PS1	22.5
0	0	1	0	PS2	45
0	0	1	1	PS3	67.5
0	1	0	0	PS4	90
0	1	0	1	PS5	112.5
0	1	1	0	PS6	135
0	1	1	1	PS7	157.5
1	0	0	0	PS8	180
1	0	0	1	PS9	202.5
1	0	1	0	PS10	225
1	0	1	1	PS11	247.5
1	1	0	0	PS12	270
1	1	0	1	PS13	292.5
1	1	1	0	PS14	315
1	1	1	1	PS15	337.5

#### LOGIC 1

C1 = -0.6V to -1.0V  
C2 = -1.4V to -1.9V

#### LOGIC 0

C1 = -1.4V to -1.9V  
C2 = -0.6V to -1.0V

## GUARANTEED PERFORMANCE

Parameter	Min	Typ	Max	Units	Conditions	
Operating Frequency	1300		1900	MHz		
DC Current		80	115	mA	At +5 VDC Supply	
		20	30	mA	At -5.2 VDC Supply	
Control Type		ECL			4 Line Differential See Logic Table	
Control Current	High	7.65	8.5	9.35	mA	C1 = -0.8 V, C2 = -1.65 V
	Low	-7.65	-8.5	-9.35	mA	C1 = -1.65 V, C2 = -0.8 V
Insertion Loss J1 - J2 or J1 - J3		5.5	6.5	dB	At 25°C	
Balance Between J1 and J3		0.2	0.5	dB	At Temperature Extremes	
		0.7	1.0	dB		
Isolation	20	25		dB	Between Ports J2 - J3 or J3 - J2	
Phase Shift	LSB	22.5		DEG	J2 with respect to J3 Minus	
Range	0		337.5	DEG	PS <sub>0</sub> at F <sub>0</sub> 22.5, 45, 90, 180	
Accuracy			±5	DEG	DEG at F <sub>0</sub>	
			±10	DEG	For 180 Phase Change	
					Any Phase State	
VSWR	Input	1.2/1	1.6/1			
	Output	1.2/1	1.6/1			
Impedance		50		OHMS		
Switching Speed		210	350	nSEC	50% ECL to 90% / 10% RF	
Transition (Rise/Fall) Time		20		nSEC	90% / 10% or 10% / 90% RF	
Switching (Video) Transients		140		mV	Peak Value	
Intercept Points	3rd	+45		dBm		
RF Power	Operate	+20	+18	dBm	0.1 dB Compression	
		+25	+23	dBm	1.0 dB Compression	
	No Damage		+27	dBm		
Operating Temperature	-55	+25	+71	°C	TA	

