



Controlled Logic Table									
Bits	Pin-1	Pin-2	Pin-3	Pin-4	Pin-5	Pin-6	Pin-7	Pin-8	Phase Degree
--	1	1	1	1	1	1	1	1	Ref=0
1	0	1	1	1	1	1	1	1	-1.4
2	1	0	1	1	1	1	1	1	-2.8
3	1	1	0	1	1	1	1	1	-5.6
4	1	1	1	0	1	1	1	1	-11.2
5	1	1	1	1	0	1	1	1	-22.5
6	1	1	1	1	1	0	1	1	-45
7	1	1	1	1	1	1	0	1	-90
8	1	1	1	1	1	1	1	0	-180
Total Phase= 360-LSB= 360-1.4 degree									-358.6

DB15 Connector Pin Control Configuration		
Pin-1 TTL= Low Phase= -1.4	Pin-9	No Connection
Pin-2 TTL= Low Phase= -2.8	Pin-10	No Connection
Pin-3 TTL= Low Phase= -5.6	Pin-11	No Connection
Pin-4 TTL= Low Phase= -11.2	Pin-12	No Connection
Pin-5 TTL= Low Phase= -22.5	Pin-13	+5 Vdc
Pin-6 TTL= Low Phase= -45	Pin-14	-5 Vdc
Pin-7 TTL= Low Phase= -90	Pin-15	Ground
Pin-8 TTL= Low Phase= -180		

Electrical Specifications:

Frequency Center:	Fc= 500±10%	Mhz	
Insertion Loss:	5.0	dB	Max
Amplitude Balance:	±1.0	dB	Typ
Phase Shift:	360-LSB	degree	Min
VSWR In / Out:	1.90:1		Max
Switching Speed:	500	nsec	Typ
Control Voltage TTL	8 Bits Low= 0-0.8V High= 2-5V		
Supply Voltages:	+5V±10% -5V±10%		
Input Power:	+30	dBm	Max
Operating Temperature:	-45°C - +85 °C		
Connectors In / Out:	SMA Female		
Connectors Control:	DB15-Male		
Note: Phase for every bit is tuned to ±2% degree of bit phase at Fc.			

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SFD500D10

Digital Phase Shifter

Dimensions are in inches and (mm)
Decimal Tolerance:
2 place +- 0.020
3 place +- 0.010

CAGE CODE :
69UC1

Rev.

A

Notes: All dimensions are typical unless they are specified.
Specifications are subject to change at any time without any notice.
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