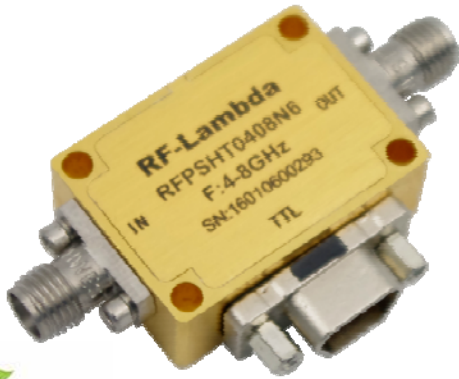




Digital Non-Dispersive 360° Phase Shifter 4-8GHz



Features

- Wide Band Operation 4-8GHz
- 360° Phase Shift
- Fast Switching Speed
- Temperature Range -45°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000 ft available upon request.

Electrical Specifications, TA = +25° C, With Vss = -5V & VCTL = 0/ +5V

Description	PN:RFPST0408N6			
	Digital Phase Shifter			
Parameters	Min	Typ.	Max	Units
Frequency Range	4		8	GHz
Phase Range		360		°
Insertion Loss		6	8.5	dB
Insertion Loss Temperature Coefficient		0.008		dB/°C
Phase Flatness		±5	±10	°
Input VSWR		1.5	2	
Output VSWR		1.5	2	
Input Power for 0.1 dB Compression		27		dBm
Ip3		45		dBm
Weight	1.41			ounces
Impedance	50			Ω
Biasing (-5v)	10			mA
Input /Output Connector	SMA-Female (Standard)			
Control PIN	MICRO-D9			
Finishing	Gold Plating			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biasing	-5V±10%
TTL Control Voltage	0~0.8V/2~5V
RF Input power	+30dBm
Storage Temperature(C°)	-45 ~ +85
Operating Temperature(C°)	-50 ~ +125

Ordering Information

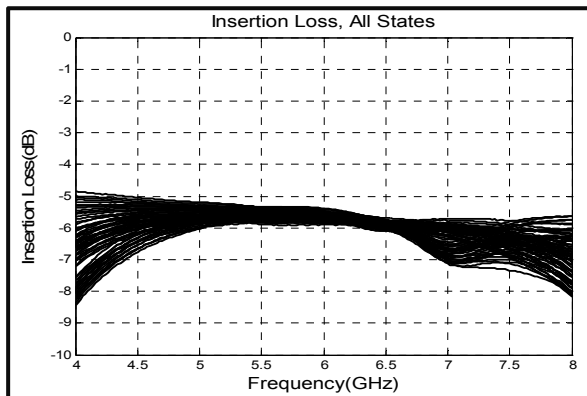
Part No	ECCN	Description
RFPSHT0408N6	EAR99	4-8GHz Digital Digital Phase Shifter

Environment specifications

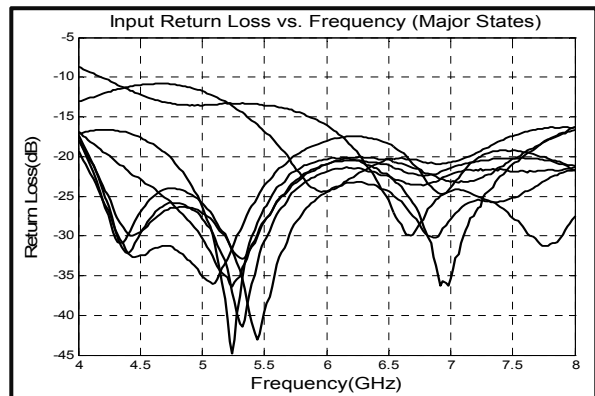
Operational Temperature (C°)	-45 ~ +85
Storage Temperature (C°)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Seal Controlled environment) 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc half sin wave, 3 axis both directions

Typical performance plots

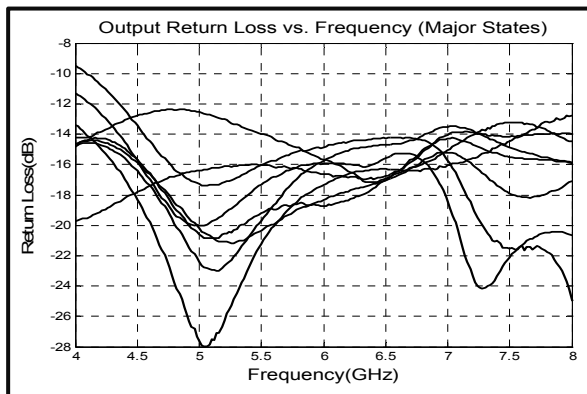
Insertion Loss



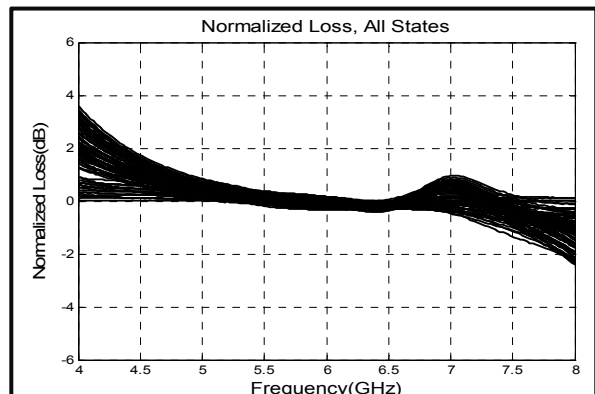
Input Return Loss vs. Frequency



Output Return Loss vs. Frequency



Normalized Loss . All States



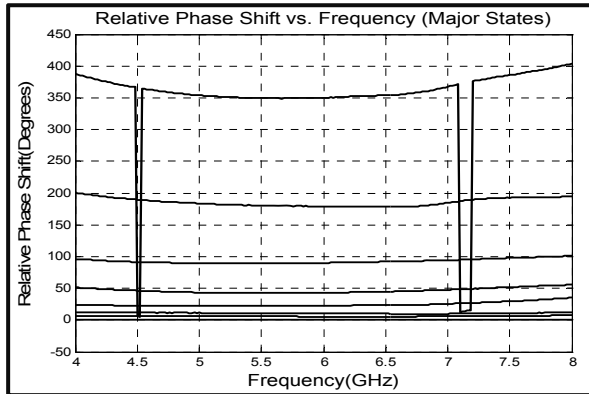


RF-LAMBDA

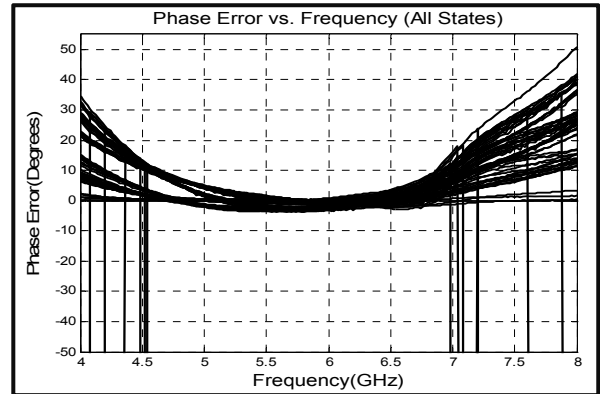
LEADER OF BROADBAND SOLUTIONS

RFPST0408N6

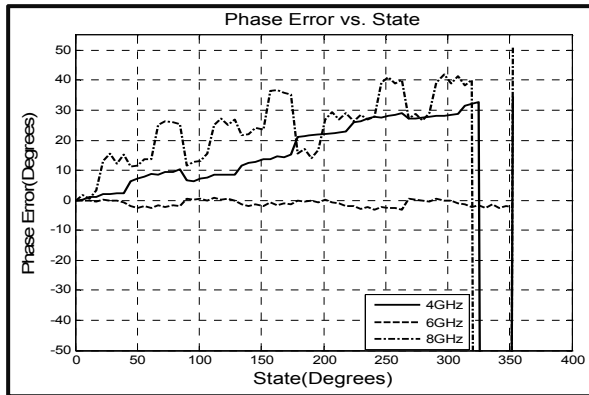
Relative Phase Shift vs. Frequency



Phase Error vs. Frequency

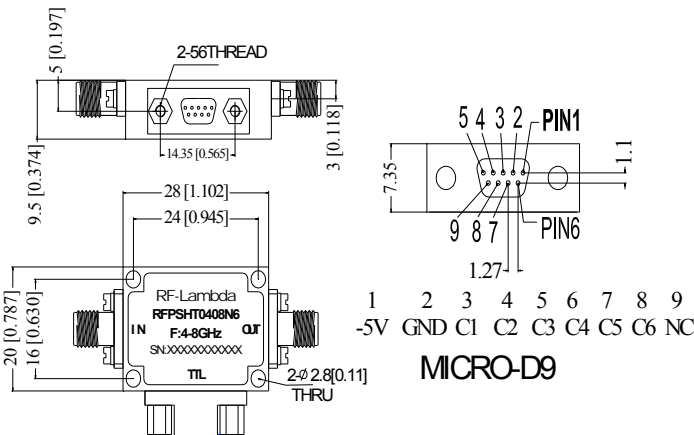


Phase Error vs. State



Outline Drawing:

All Dimensions in mm (inches)



Truth Table

Control Voltage Input						Phase Shift (Degree)
C6	C5	C4	C3	C2	C1	
0	0	0	0	0	0	Reference
0	0	0	0	0	1	-5.6
0	0	0	0	1	0	-11.25
0	0	0	1	0	0	-22.5
0	0	1	0	0	0	-45
0	1	0	0	0	0	-90
1	0	0	0	0	0	-180
1	1	1	1	1	1	-354



ATTENTION
 STATIC SENSITIVE DEVICES
 HANDLE ONLY AT
 STATIC SAFE WORK STATIONS

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Digital Non-Dispersive Phase Shifter 4-8GHz