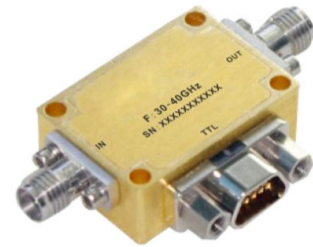




Digital Non-Dispersive 180° Phase Shifter 30-40GHz

Features

- Wide Band Operation 30-40GHz
- 180° Phase Shift
- Fast Switching Speed
- Temperature Range -40°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000 ft available upon request.



Parameters	Min.	Typ.	Max.	Units
Frequency Range	30		40	GHz
Phase Range		180		°
Insertion Loss		4.5	5.5	dB
Insertion Loss Temperature Coefficient		0.008		dB/ °C
Phase Flatness		±4		°
Input VSWR		1.5	2.0	: 1
Output VSWR		1.5	2.0	: 1
Input Power for 1 dB Compression		-		dBm
Ip3		-		dBm
Switching Speed		-		ns
Weight		1.41		ounces
Impedance		50		Ω
Bias Current (+5V)		1		mA
Input / Output Connectors		2.92mm-F (Standard)		
Interface and Control Connector		MICRO-D9 (Female)		
Finishing		Gold Plating		
Material		Brass		
Sealing		Hermetically Sealed (optional)		



Absolute Maximum Ratings

Biasing	+5V/1mA
TTL Control Voltage	+5V/0V
RF Input power	+20dBm

Environmental Specifications

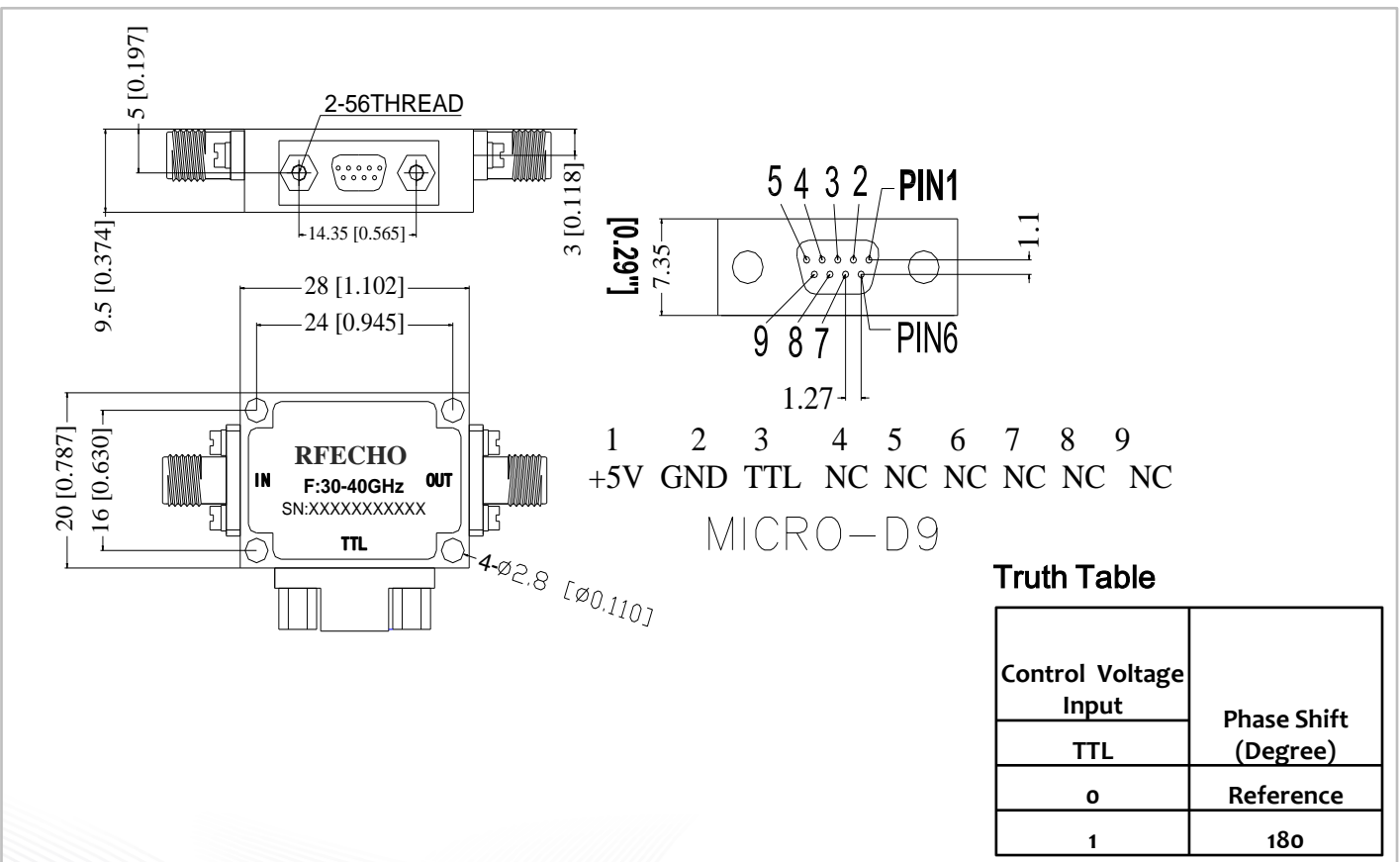
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Ordering Information

Part No.	Description
DBDP0130004000A	30-40GHz Digital Phase Shifter

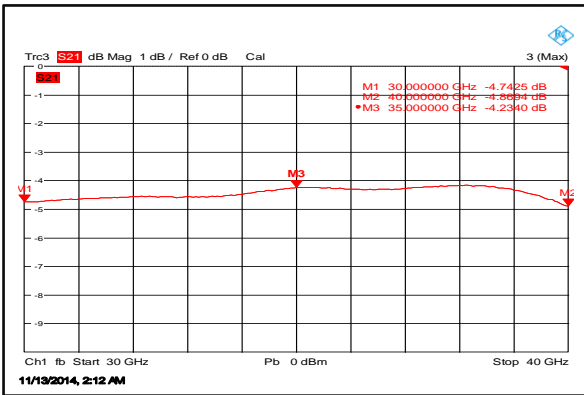
Outline Drawing:

All Dimensions in mm (inches)

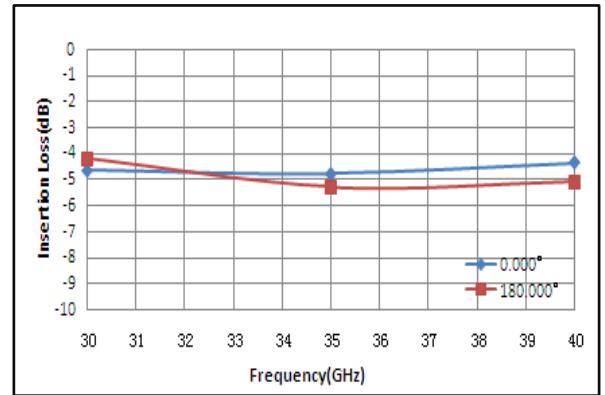




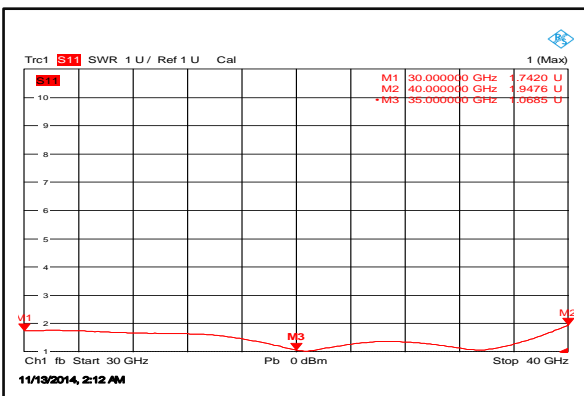
Insertion Loss



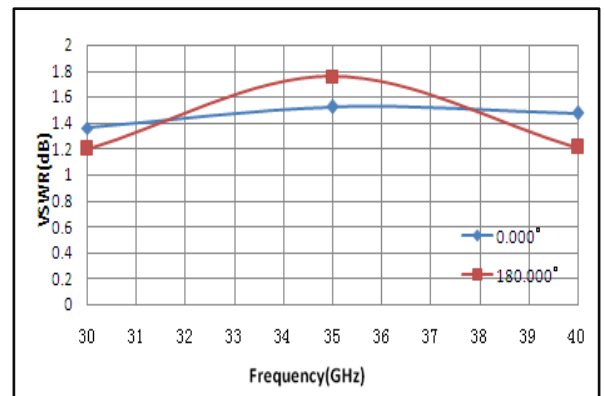
Insertion Loss vs. Frequency



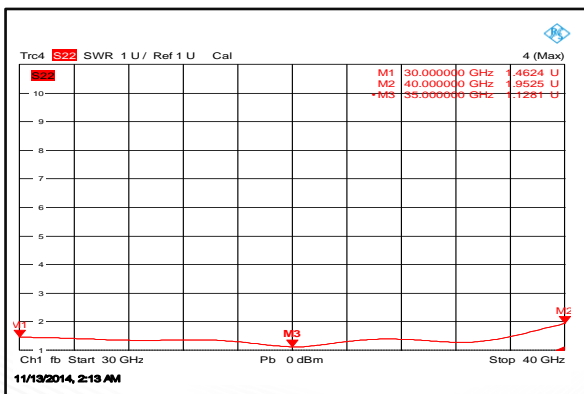
Input VSWR



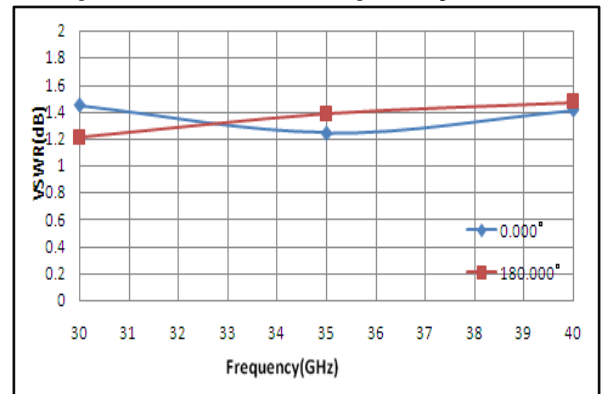
Input VSWR vs. Frequency



Output VSWR

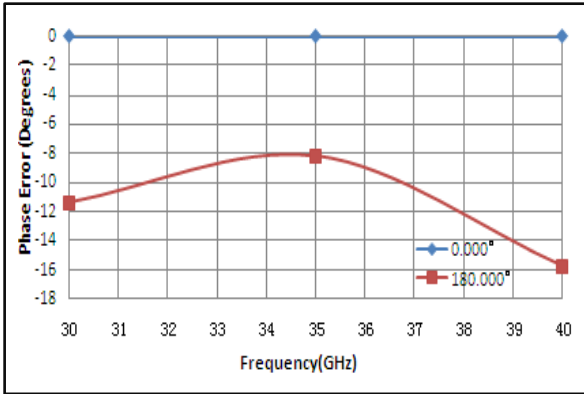


Output VSWR vs. Frequency





Phase Error vs. State



Relative Phase Shift vs. Frequency

