

# Jersey Microwave

## DIGITAL PHASE SHIFTERS DP-SERIES

### Features

- ✓ Low Insertion Loss
- ✓ Fast Switching
- ✓ Low Cost & High Reliability
- ✓ Customized Frequency Band & Interface Logic to meet specific requirements



### Description

Jersey Microwave's DP series of digital phase shifters are solid-state devices that incorporate a wide variety of techniques to achieve high performance over a wide range of specification requirements. A combination of switched lines, loaded lines, and switched reflection are used to achieve minimum loss in these linear phase designs. All designs are implemented using microstrip technology. RF conductors, as well as decoupling elements of DC bias circuits, are etched on the substrate allowing for minimum parts count, maximum repeatability, lowest production cost, and high reliability. Integral TTL compatibility is included in all models as standard. Jersey Microwave components can be tailored to meet your company's specific needs.

### Specifications

Parameter	Limit
Frequency Range	Bands of up to one octave, within the range of 0.3-18 GHz
Insertion Loss	0.2 - 0.5 dB/bit typical (frequency dependent)
VSWR	1.35:1 up to 2GHz 1.50:1 up to 8GHz 1.80:1 up to 18GHz
Insertion Loss Variation	0.25 dB per bit
Switching Speed	50 nsec for low power unit 500 nsec for high power unit
Power Handling	Up to 100W Peak
Temperature Stability	+/- 1°
Repeatability	+/- 1°
Control Input	TTL
DC Power Requirement	+5 VDC @ 50ma/bit -15 VDC @30ma/bit
Interfaces DC Connector RF Input/Output	D-Sub Connector SMA-Female
Temperature Range	-40° C to +80° C

Note: Specifications are subject to change without notice