

PHASE SHIFTERS

MITEQ offers a 6-BIT to 18 GHz digital phase shifter operating as high as 18 GHz for EW applications. This product offers exceptional power handling capability in excess of 25 dBm and switching speed of 20 ns maximum. This device is ideally suited for phased array applications and interferometric receivers. We also offer a number of narrowband analog phase shifters that utilize switched line and reflection phase shifter topologies.

3 BIT, 9–10 GHz DIGITAL PHASE SHIFTER

SPECIFICATIONS - MODEL 126138

Phase states	0° (Ref.), 90°, 180°, 270°		
Frequency range	9–10 GHz		
Insertion loss	7 dB maximum		
VSWR	1.7:1 maximum		
Switching speed	20 ns maximum		
Phase accuracy	±5° maximum		
Amplitude balance	±0.5 dB maximum		
Control	TTL, 2 lines		
Logic truth table	E1	E2	Phase
	0	0	0°
	0	1	90°
	1	0	180°
	1	1	270°
DC power	±5 V @ 50 mA maximum		
Outline drawing	1		

6 BIT, 6–18 GHz DIGITAL PHASE SHIFTER

SPECIFICATIONS - MODEL PS-0618-360-5-5.6

RF frequency range	6–18 GHz
Insertion loss	9 dB typical, 12 dB maximum
Input/output VSWR	1.6:1 maximum
Maximum phase shift	360°
Phase shift step size	5.6° minimum
Phase error	3° typical, 6° maximum over RF band
Input third order intercept	40 dBm typical, 35 dBm minimum
Switching speed	20 ns maximum
DC control voltages	0 V and -5.5 V
Number of control lines	9
DC control connector	ITT cannon MDM 9 pin
RF connectors	SMA female
Outline drawing	2

4 BIT, 2.9–3.1 GHz DIGITAL PHASE SHIFTER

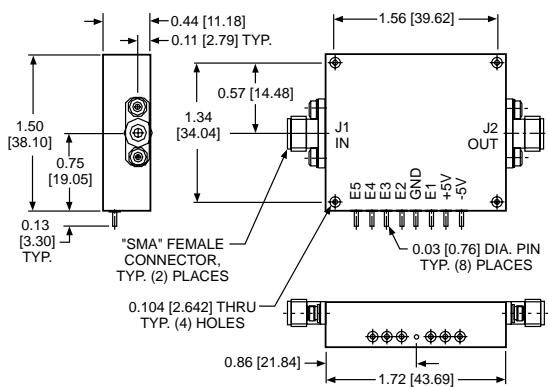
SPECIFICATIONS - MODEL 124787

Phase states	4
	0° (Ref.), 22.5°, 45°, 90°, 180°
Frequency range	2.9–3.1 GHz
Insertion loss	3 dB maximum
VSWR	1.5:1 maximum
Switching speed	25 ns maximum
Phase accuracy	1° maximum
Amplitude accuracy	0.25 dB maximum
Control	TTL, "0" = Path on
Outline drawing	1

ENVIRONMENTAL CONDITIONS

Operating temperature 0 to 70°C
Storage temperature -30 to +85°C

OUTLINE 1



GENERAL NOTES:

- Dimensions shown in brackets [] are in millimeters.
- Tolerance as follows: .xx = ±0.01 [.xx = ±0.25], .xxx = ±0.005 [.xxx = ±0.13]

OUTLINE 2

