

FEATURE:

- Optimized for fast switching speeds(down to 20 ns maximum)
- Optimized for lowest phase deviation over band
- RMS phase error $\leq 3^\circ$ typical
- Low insertion loss
- Power handling up to 30 dbm
- OIP3(typically 25 dbm)
- Hermetic sealing available



APPLICATION:

- Test equipment
- Radar&Warfare array system
- Communication system

ELECTRICAL SPECIFICATIONS@25°C:

Parameter	Min	Typical	Max	Units
Frequency Range	24.8		25.2	GHz
Insertion Loss			2.0	dB
VSWR			1.9:1	Ratio
Switching Speed			1	uS
Phase accuracy			± 5	$^\circ$
Amplitude balance			± 0.2	dB
Phase shift			360	$^\circ$
Phase shift step size			11.25	$^\circ$
Control Logic TTL Compatible		5		bits
Power handling			30	Watt
DC Power supply		15		Volt
DC Power supply		100		mA

Note:all spec is based on 25GHz frequency point test.

ENVIRONMENTAL RATINGS:

Parameter	Min	Typical	Max	Units
Operating Temperature	-40		+70	$^\circ\text{C}$
Non-operating Temperature	-45		+85	$^\circ\text{C}$
Relative humidity (non-condensing)		95		%
Altitude (MIL-STD-810F)	1000		30000	feet
Shock / Vibration (MIL-STD-810F)		Airbone		

DB9 PIN ASSIGMENT:

PIN1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8	PIN9
+15V	C1	C2	C3	C4	C5	C6	GND	NO

MECHANICAL SPECIFICATIONS:

Parameter	Value	Limits	Units
Dimensions	100*10*10	Max	Millimeter
Weight	150	typical	gram
RF Connectors Input	SMA-F		
RF Connectors output	SMA-F		
DC/Logic interface	DB9 female		
Impedance	50		ohms

CONTROL TRUE TABLE:

Control bits		Phase shift				
C6C5C4C3C2C1	5.625	11.25	22.5	45	90	180
000001	ON	OFF	OFF	OFF	OFF	OFF
000010	OFF	ON	OFF	OFF	OFF	OFF
000100	OFF	OFF	ON	OFF	OFF	OFF
001000	OFF	OFF	OFF	ON	OFF	OFF
010000	OFF	OFF	OFF	OFF	ON	OFF
100000	OFF	OFF	OFF	OFF	OFF	ON

OUTLINE DRAWING(mm):

