

# **Radar Target Simulators**

**Bulletin No. SSA** 

### **FEATURES**

- Low routing loss
- High image rejection
- Separate I/Q input ports
- Low harmonic and spurious emission
- Circular or rectangular waveguide interface

## **APPLICATIONS**

- Radar target simulator
- Single side band modulation
- Forward and backward moving object simulator



**SSA Series** 

### DESCRIPTION

**SSA** series Radar target simulators is a single side band (SSB) modulators, which can simulate the moving Radar target for Doppler Radar system testing. The simulator can eliminate expensive and time consuming field test for most Doppler/ speed Radar manufacturers. The modulators are available in major Doppler Radar frequency bands, such as K band (24.15 GHz), Ka band (35 GHz), V band (60 GHz), and W band (77 GHz and 94 GHz).

The simulators are capable of simulating the approching and receding moving target by varying the relative phase of I and Q channel audio input signals, the speed of the target by adjusting the audio input frequency and the size and/or distance of the target by adjusting the attenuator value.

The existing product specifications are illustrated as following. Other frequency bands are available up request.

## **SPECIFICATIONS**

Typical Specifications (Single Channel)					
Parameters	SSA-4212-XX	SSA-2812-XX	SSA-1513-XX	SSA-1214-XX	SSA-1015-XX
Frequency (GHz)	24.150	35.50	60.00	76.50	94.00
Bandwidth (MHz)	+/- 50	+/- 75	+/- 100	+/- 100	+/- 100
Routing Loss (dB)	12 dB	12 dB	13 dB	14 dB	15 dB
Image Rejection (dBc)	-20	-20	-20	-20	-20
Attenuation Level (dB)*	30	30	30	30	30
I/Q Driven Current (mA)	10	10	10	10	10
RF Connector	WR-42 or Circular	WR-28 or Circular	WR-15 or Circular	WR-10 or Circular	WR-10 or Circular
I/Q Connectors	SMA (F)				
Temperature Range	0 to +50°C				

\* Note: 60-dB round trip.