

# ASC317

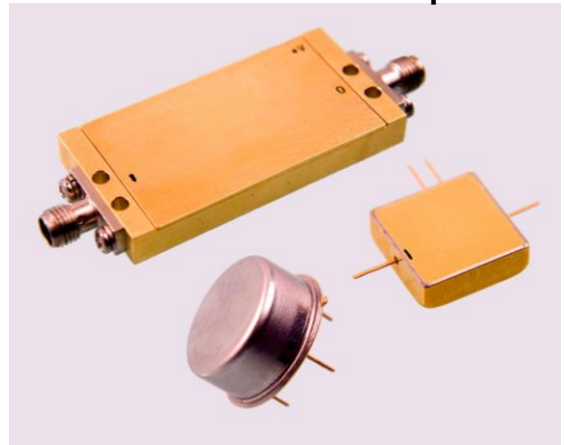
### Features: (typical values)

- High IP3 ..... +53.0 dBm.
- Low NF ..... 2.0 dB.
- High Output Power ..... +40.5 dBm.
- Low cost
- No external components required

### Maximum Ratings

Storage Temperature ..... -40°C to +125°C  
 DC Voltage ..... +14 volts  
 RF Input Power ..... +5 dBm.  
 Case Temperature ..... +95°C

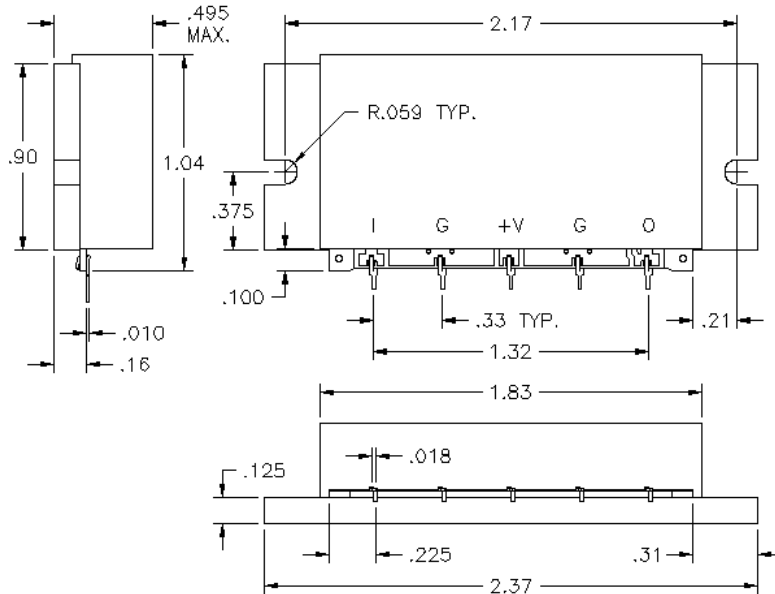
### 450-512 MHz Ultra-Linear 10 Watt Amplifier



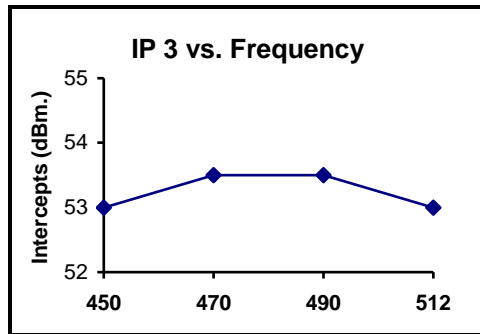
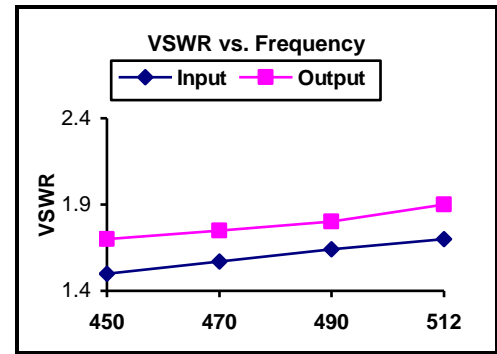
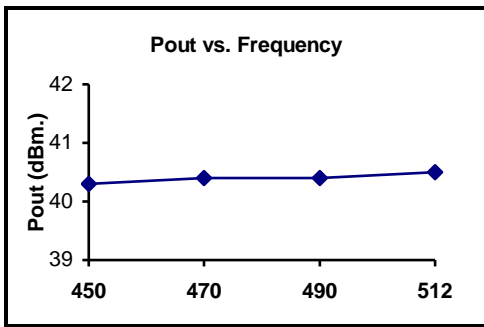
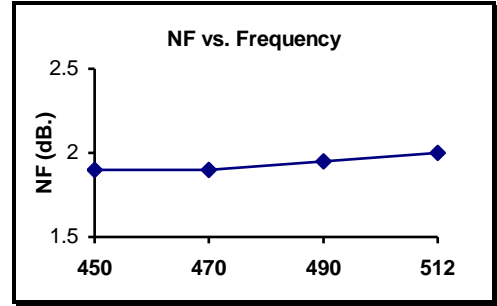
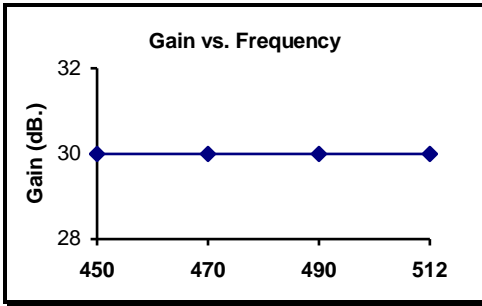
Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		450	512	MHz.
Gain	30.0	28.0		dB.
Gain Flatness	±0.2		±1.0	dB.
Reverse Isolation	45			dB.
Pout @ 1dB Comp	40.5	39.0		dBm.
Noise Figure	2.0		3.5	dB.
VSWR (Input/Output)	1.6/1.9		2:1/2.5:1	
IP <sub>3</sub> (two-tone)	+53.0	+50.0		dBm.
Supply Required	+12/2000		+12/2200	v/mA.

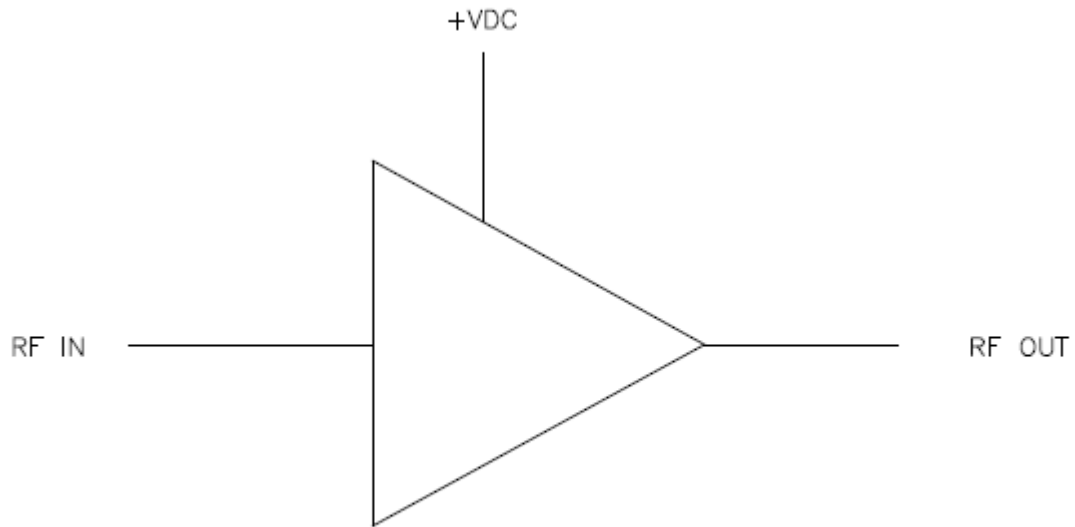
IP<sub>3</sub> measured with 2 tones @+30 dBm. per tone  
 Min and max values from 0 to 85 degrees C



Typical Performance Curves @ 25°C



FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED