

Features: (typical values)

- Ultra High Linearity
- Low Noise Figure
- Rugged Construction
- Operation over wide voltage range
- **Super Low Cost**
- Unconditional Stability
- No external component required

Maximum Ratings

Storage temperature -40°C to +100°C
 DC Operating Voltage +26.0 volts
 RF Input Voltage 40 dBmV max.
 Operating Base Temp. +100°C

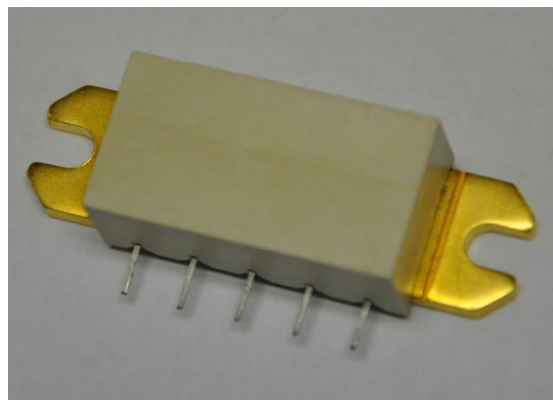
Product Description:

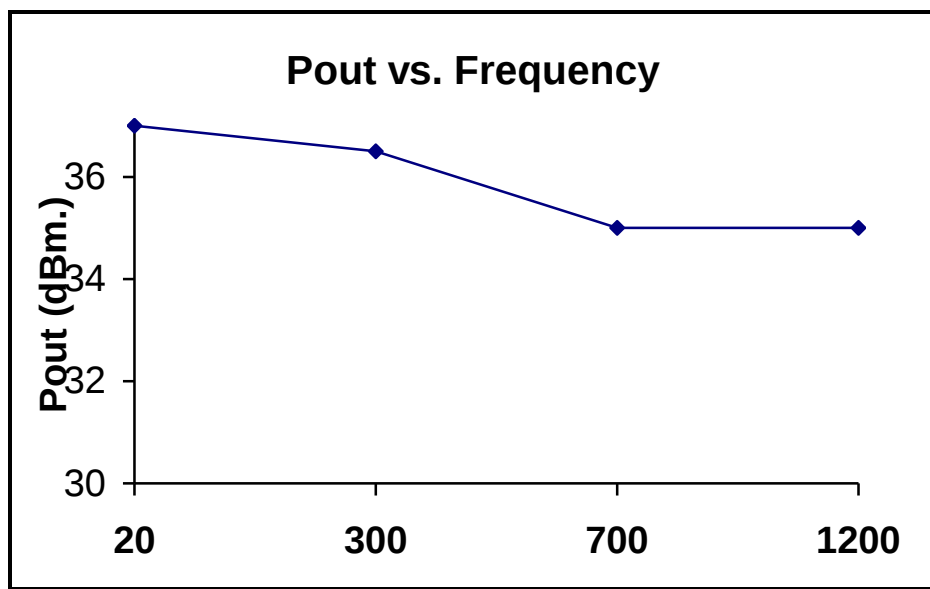
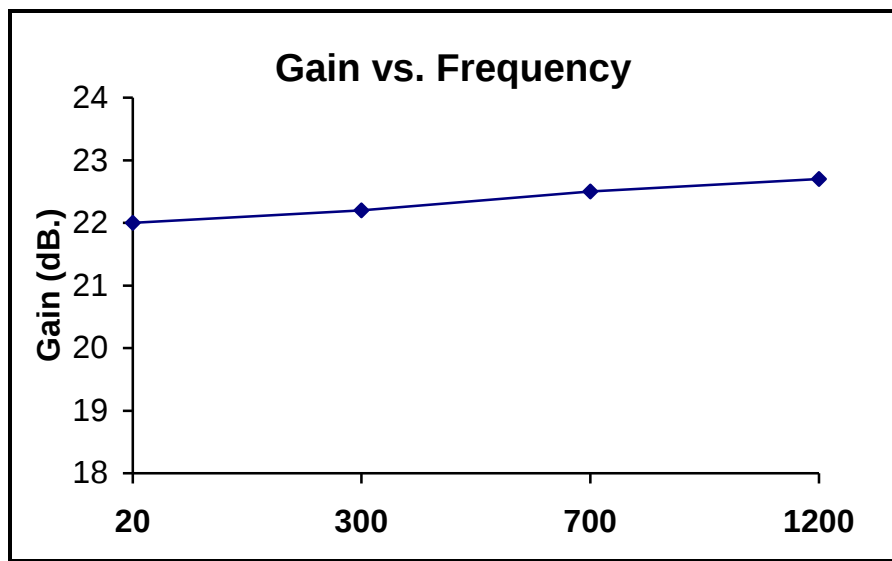
ASC520 is a Power Doubler SMD module. It contains GaAs pHEMT die driving GaN die and is operating from 20MHz to 1200MHz. It provides excellent linearity with low Noise Figure and optimal reliability.

Specifications @ Tcase = 30°C (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency Range		20	1200	MHz.
Power Gain	22.0 dB	21.0	23.0	dB.
Gain Flatness	f = 20MHz. TO 1200MHz.		1.0	dB.
Input/Output VSWR			2.0 :1	dB.
IP3 2 tones @ +15dbm per tone	52dBm	49.0		dBm.
IP2 2 tones @ +15dbm per tone	80 dBm	70.0		dBm.
P1dB	+37 dbm 20mhz-550mhz +35dbm 550mhz-860mhz	33		dbm
Noise Figure (NF)	2.3 dB		4.0	dB.
Total Current (I _{TOT})	+24V/470mA		500	mA.

20 – 1200 MHz
22 dB Ultra-linear
Amplifier





OUTLINE DRAWING

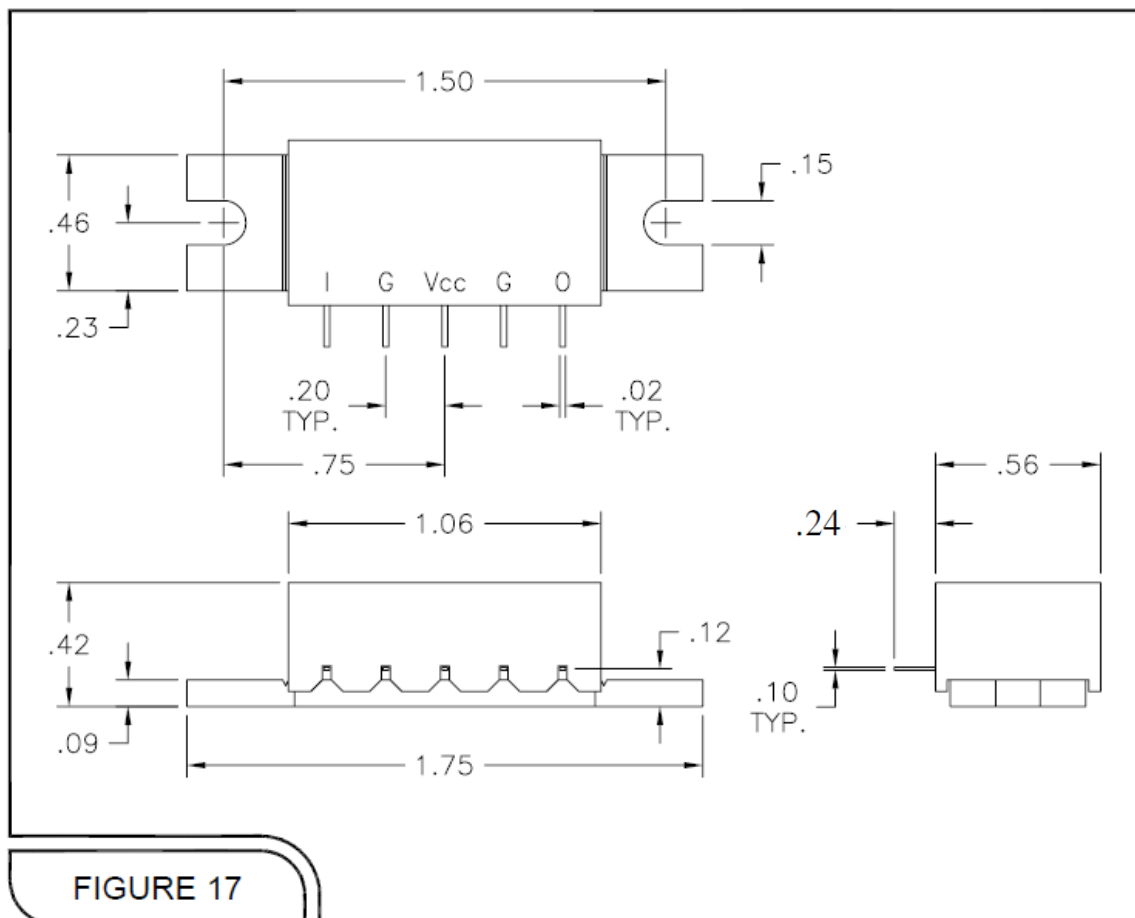


FIGURE 17

Pin Configuration

PIN#.....	Description
I.....	Input
G.....	Ground
Vcc	+24V.
O	Output

FUNCTIONAL BLOCK DIAGRAM

