

Features: (typical values)

- Output Power – 27dbm. @ 1dB. compression,
- IP3 – 42 dBm.
- IP2 – 80 dBm.
- Unconditional Stability
- No external components required

**2 - 20.0 MHz
Push-Pull Amplifier**

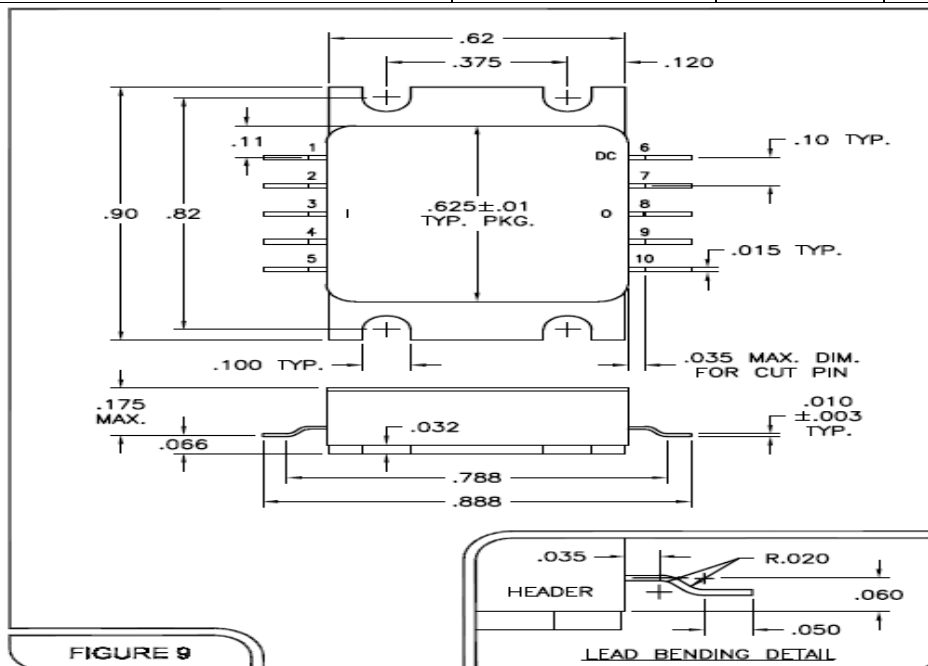


Maximum Ratings

Storage temperature -55°C to +125°C
 DC Operating Voltage +13.0 volts
 RF Input Voltage +33dBm. Max.
 Operating Base Temp. -15 to +85°C

Specifications @ Tcase = 25°C, Vcc = 12V, 50 ohm systems unless otherwise noted.

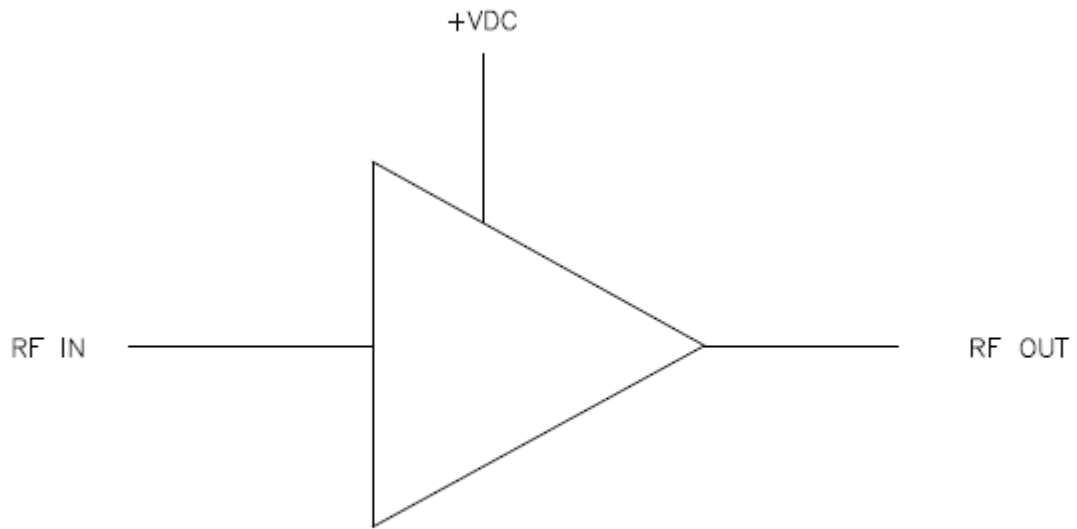
Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency Range		2	20	MHz.
Power Gain	18	17	19	dB.
Gain Flatness (peak to peak)	±0.3		±1.0	dB.
Gain Matching over temp	±0.3		±0.5	dB
Phase Matching over temp	±2.0		±3.0	Deg
Phase Tracking over temp	±0.3		±0.5	Deg
Input VSWR	1.3		1.5:1	-
Output VSWR	1.3		1.5:1	-
Reverse Isolation	25.0			dB
Noise Figure	3.8		4.3	dB.
Power Output- 1dB Compression	27	26		dBm.
Third Order Intercept (IP3)@ 15 dBm per tone	42	40		dBm.
Second Order Intercept (IP2) @ 15 dBm per tone	80	75		dBm.
Supply Current @ 12 Volts	200		230	mA.
Operating Temperature -15C to +85C				



**FINAL TEST REPORT +25°C
ASC2772**

TEST	LIMITS / SN	ACTUAL DATA
GAIN 2 MHz TO 20 MHz	17.0 dB min	18.1
	19.0 dB max	18.2
GAIN FLATNESS 2 MHz TO 20 MHz	±1.0 dB max	±0.05
REVERSE ISOLATION	25 dB Typ	22
DC CURRENT AT +12 Vdc	230 mA max	210
INPUT VSWR 2 MHz TO 20 MHz	1.5 : 1 max	1.32
OUTPUT VSWR 2 MHz TO 20 MHz	1.5 : 1 max	1.26
NOISE FIGURE 2 MHz TO 20 MHz	4.3 dB max	3.88
P1.0 dB COMPRESSION 2 MHz TO 20 MHz	+26.0 dBm min	26.6
IP2 WITH POUT=15.0 dBm EACH TONE 1) F1-F2=20MHz - 18MHz, Fc=2MHz 2) F1+F2=2MHz + 18MHz, Fc=20MHz	75.0 dBm min	79.0
IP3 WITH POUT=15.0 dBm EACH TONE 1) F1/F2=3/4 MHz, Fc=2/5 MHz 2) F1/F2=20/21 MHz, Fc=19/22 MHz	40.0 dBm min	43.0
Maximum Input power: no significant change in NF after +33 dBm @10 MHz applied to RF Input	NO CHANGE	NC
Gain Matching	± 0.5dB Max	0.02
Phase Matching	± 3.0 Deg max	0.15
Phase Tracking	± 0.5 Deg Max	0.12
SPURIOUS RESPONSE	ACCEPT/REJECT	AC
STABILITY TEST FOR ALL FREQUENCY RANGE WHERE [S21] > 0 dB	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED