

ASC2861

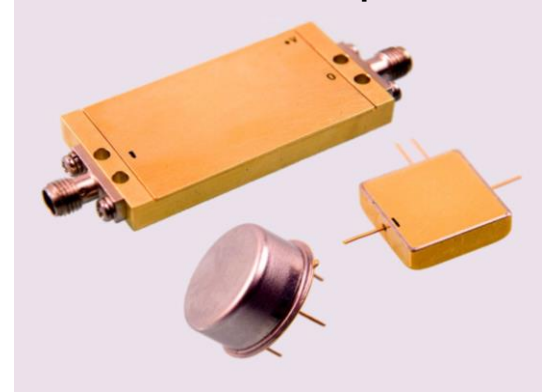
Features: (typical values)

- Output Power 10.0 dBm.
- Noise Figure 2.5 dB.
- High Gain 28.0 dB.
- No external components required

Maximum Ratings

Storage Temperature -62°C to +125°C
 DC Voltage +10 volts
 RF Input Power +6 dBm.
 Case Temperature +125°C

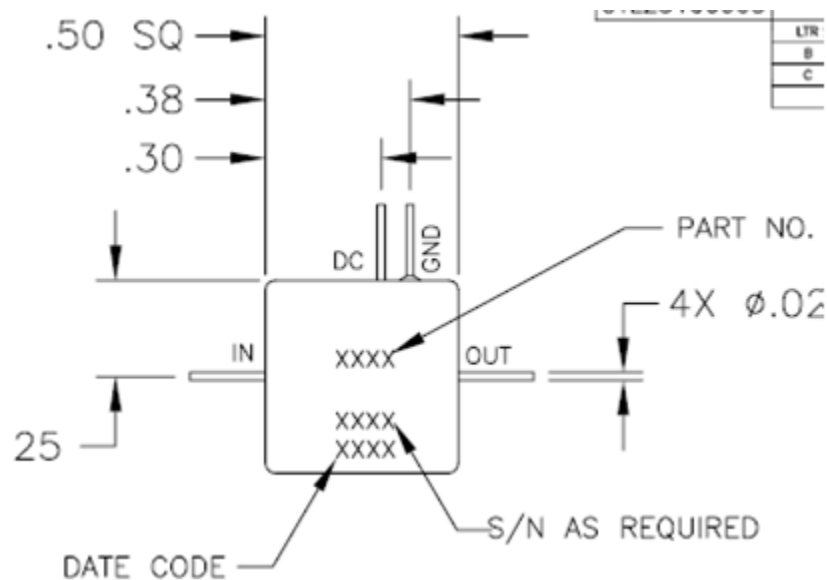
10-200 MHz Cascadable Amplifier



Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		10	200	MHz.
Gain	28	26		dB.
Gain Flatness	±0.6		±1.0	dB. p-p
Gain Var. over temp	0.6			dB.
Pout @ 1dB Comp	+10.0	+7.0		dBm.
Noise Figure	2.5		3.5	dB.
Reverse Isolation	-38.5		-37	dB.
IP ₃ /IP ₂ (two-tone)*	20/28			dBm.
VSWR In/Out	1.75:1		2.0:1	
Supply Required	+5/21		+5/24	v/mA.

Min. and max. values are from -55°C to +85°C
 *IP₃ and IP₂ are in band output intercept points



DESCRIPTION: ASC2861
+25°C

TEST	LIMITS / SN	ACTUAL DATA
GAIN 10 MHz TO 200 MHz	26.0 dB min	26.5
		27.1
GAIN FLATNESS 10 MHz TO 200 MHz	±1.0 dB max	±0.3
REVERSE ISOLATION 10 MHz TO 200 MHz	-37 dB max	-49
DC CURRENT AT +5 Vdc	25mA max	25
INPUT VSWR 10 MHz TO 200 MHz	2.0 : 1 max	1.73
OUTPUT VSWR 10 MHz TO 200 MHz	2.0 : 1 max	1.7
NOISE FIGURE 10 MHz TO 200 MHz	3.5 dB max	2.82
P1.0 dB COMPRESSION 10 MHz TO 200 MHz	+7.0 dBm min	>9.0
IP3 WITH Pout = -8.0 dBm EACH TONE 1) F1=11MHz; F2=12MHz, Fc=10/13MHz 2) F1=198MHz; F2=199MHz, Fc=197/200MHz	20.0 dBm typ	21.5
IP2 WITH Pout = -8.0 dBm EACH TONE 1) F1= 90 MHz; F2=100; Fc=10/190 MHz	28.0 dBm typ	26.0
STABILITY TEST FOR ALL FREQUENCY RANGE WHERE [S21] > 0 dB	0 dB max	<0

FUNCTIONAL BLOCK DIAGRAM

