

Features:

- Octave bandwidth, specification from 20~3000MHz
- Low noise figure, and high gain, and input PIN limiter protection
- Low VSWR, unconditional stable
- SMA female connector I/O
- Single DC power supply, low power consumption, internal voltage regulator, operating voltage from +10~+15V
- Operating temperature -40~+85°C, storage temperature -55~+125°C

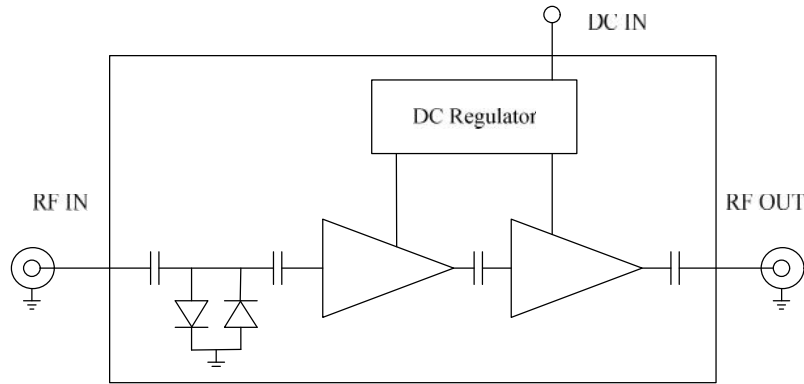
General Description

ABL0300-01-2517DP is a PIN diode protected two stage enhancement mode pHEMT transistor based broadband low noise amplifier module operating in the frequency range from 20MHz to 3.0GHz. The amplifier provides 25dB of small signal gain with 1.7 dB typical noise figure. The amplifier requires only a single positive DC power supply. Its built-in DC voltage regulator and reverse polarity protection circuitry allows the amplifier to function at different DC supply voltages without affecting the RF performances.

Electrical Specifications

Parameters	Units	Specifications		
		Minimum	Typical	Maximum
Frequency Range	MHz	20.0		3000.0
Nominal SS Gain @25°C	dB	22.5	25.0	27.0
Gain flatness	dB		+/-0.75	+/-1.0
Gain Variation	dB		+/-1.25	
Noise Figure @25°C	dB		1.7	2.0
P-1dB Compression Point	dBm	+12.0	+13.0	
Output IP3	dBm	+20.0	+23.0	
Input VSWR	-		1.5:1	1.8:1
Output VSWR	-		1.5:1	1.8:1
Reverse Isolation	dB	40.0	45.0	
Spurious	dBc			-70.0
Operating Temperature	°C	-40		+85
Survival Temperature	°C	-55		+125
DC Voltage	°C	+10.0	+12.0	+15.0
DC Supply Current	mA	65.0	75.0	120 mA
In/Out connectors	-	SMA female		
Size	inches	1.5×0.85×0.375		

Functional Diagram



Mechanical Structure:

