

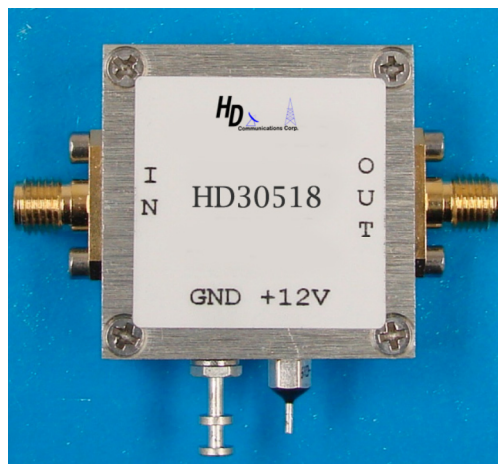
HD30518

20 – 520 MHz Low Noise Amplifier

Features

- Frequency Range: 20 - 520MHz
- Gain: 33dB
- P_{1dB}: +18dBm
- IP3: +34dBm
- Noise Figure: 1.4dB
- DC Power: 12V/100mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Performance measured @ 250MHz



Description

HD30518 is a flat response Low Noise Amplifier operates in frequency range from 20MHz to 520MHz.

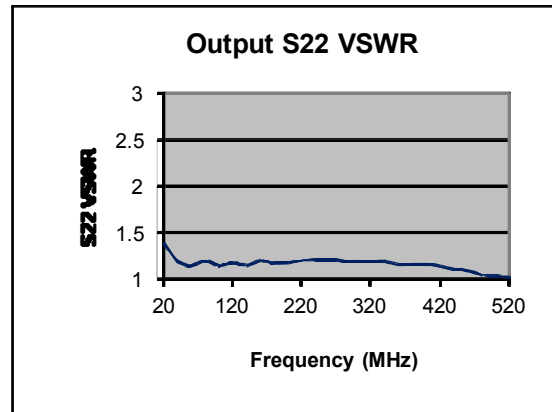
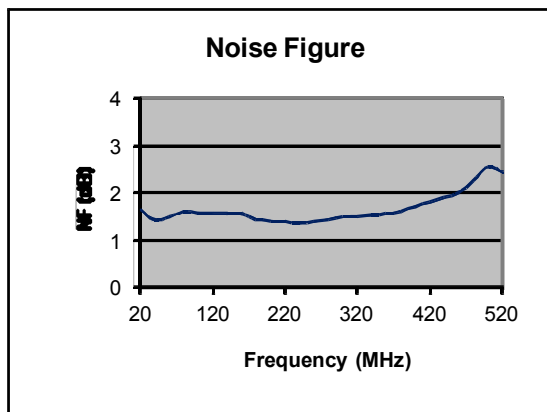
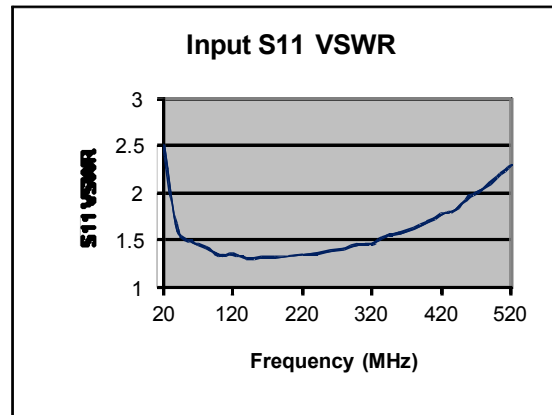
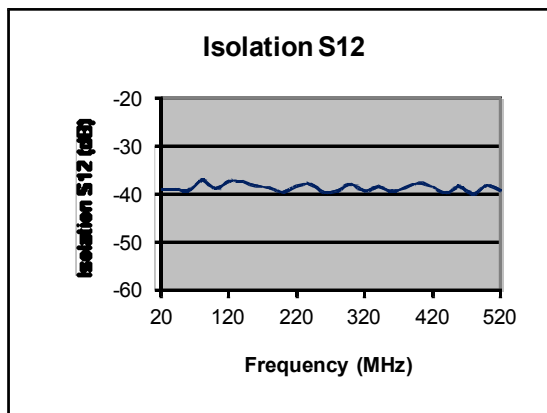
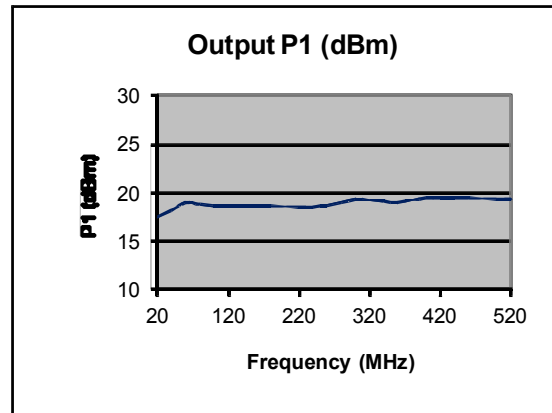
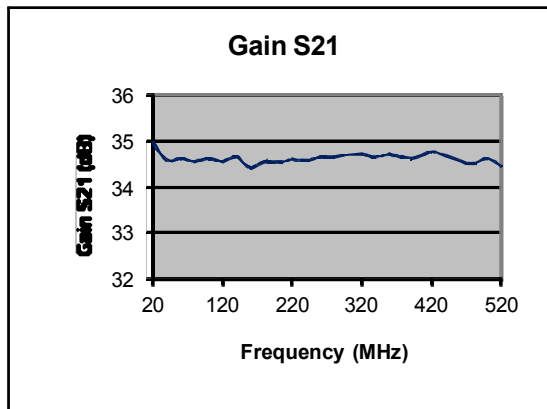
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	20		520
Gain f = 20MHz	dB	33	34.9	
f = 100MHz	dB		34.6	
f = 250MHz	dB		34.6	
f = 400MHz	dB		34.6	
f = 520MHz	dB		34.4	
Gain Flatness	dB		± 0.3	± 0.5
P _{1dB}	dBm		+18	
IP3	dBm		+34	
Noise Figure	dB		1.4	
Reverse Isolation	dB		-38	
VSWR Input VSWR			1.4:1	
Output VSWR			1.2:1	
DC Power Supply	V		12 to 15	18
Supply Current	mA		100	

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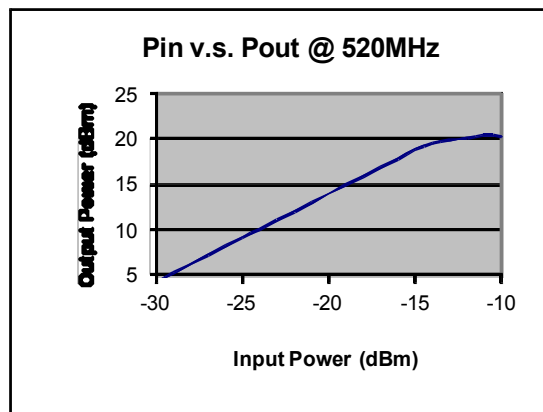
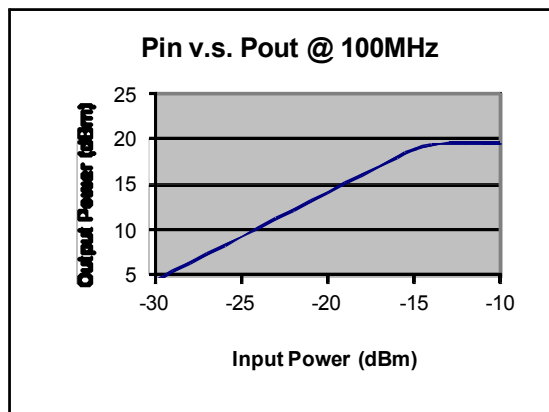
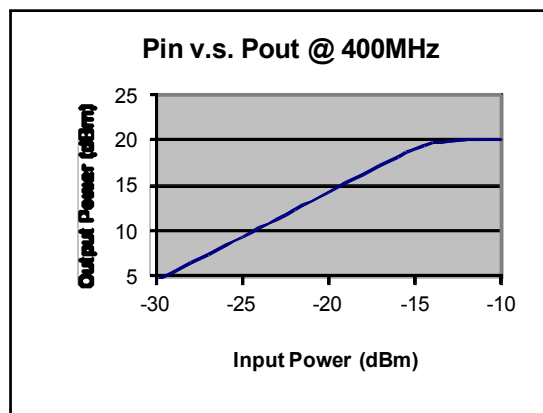
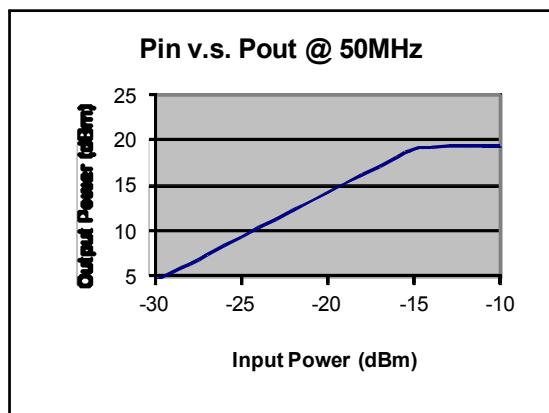
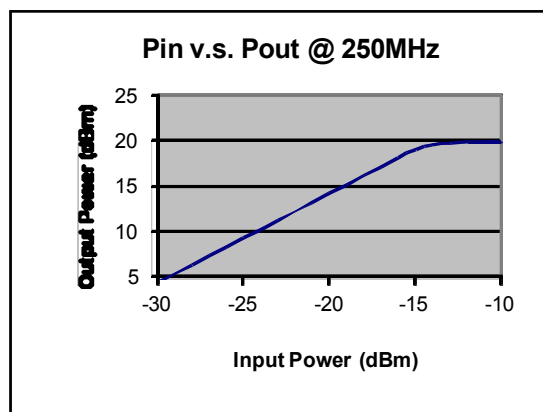
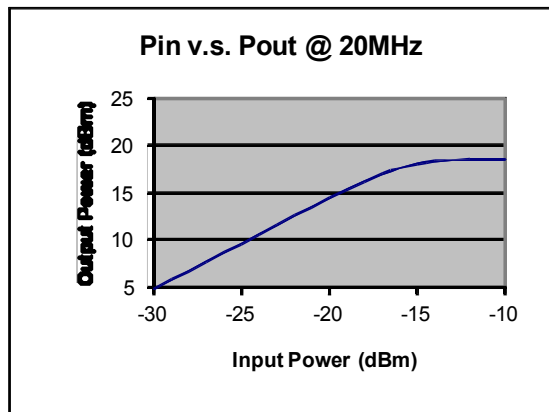
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



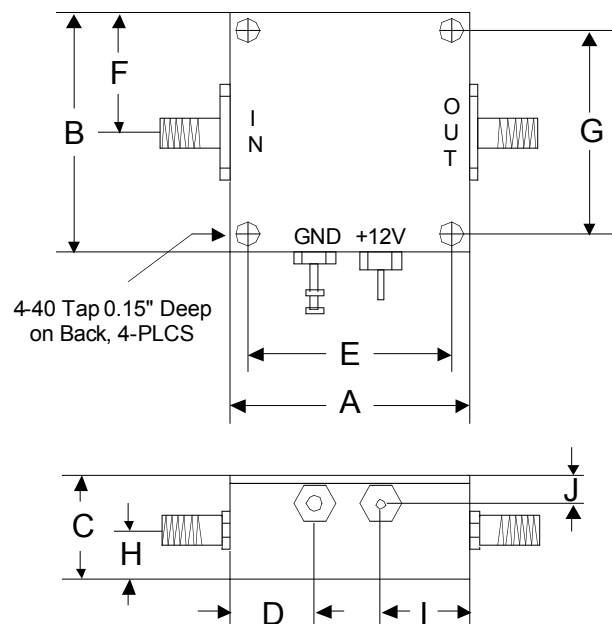
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20 – 520 MHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76