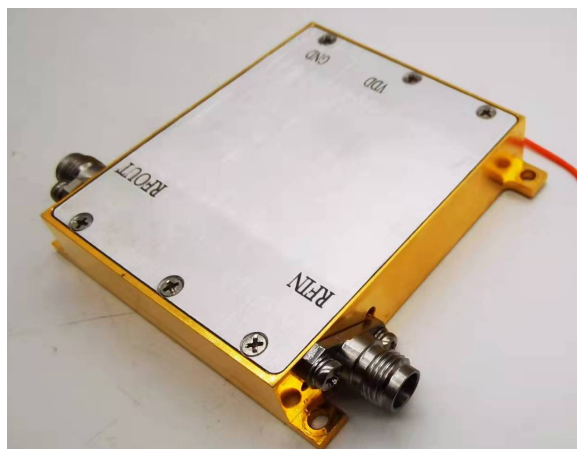


33 – 40GHz 2W RF Power Amplifier

Features

- Frequency Range: 33-40GHz
- Gain: 40dB
- P_{1dB}: +33dBm (2W)
- P_{SAT}: +34.5dBm (2.8W)
- DC Power: +8V @ 3.7A
- RF Connector: 2.92mm-female

Photo



Description

HD33999 is a wide band high performance 2W RF Power Amplifier, with standard frequency range of 33 to 40GHz.

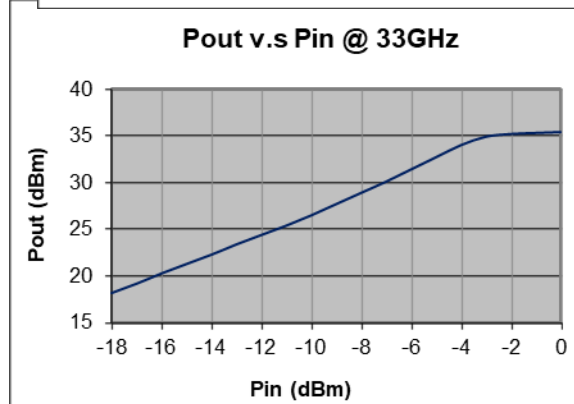
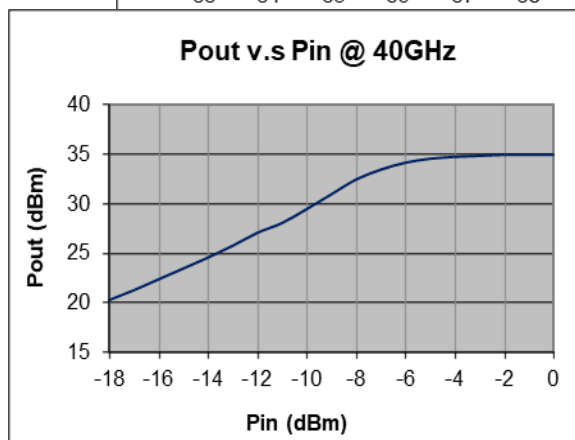
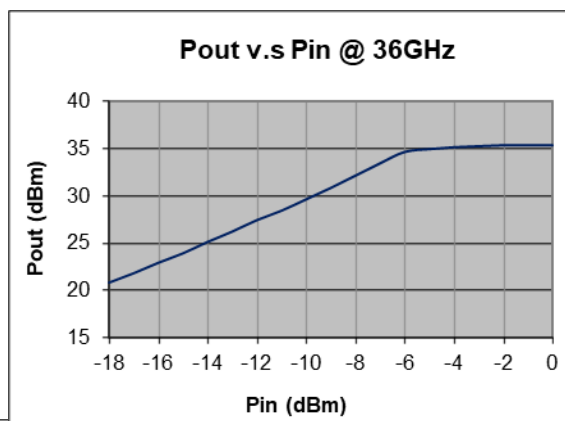
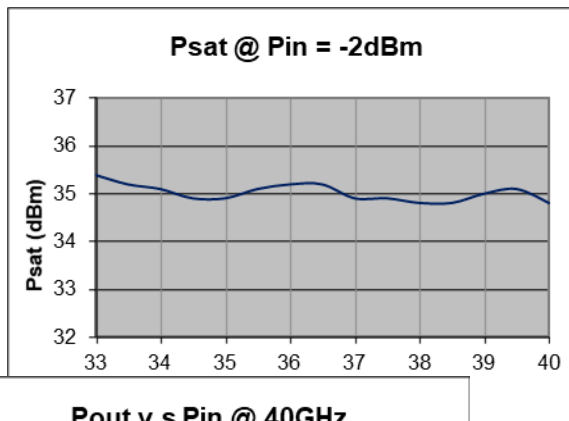
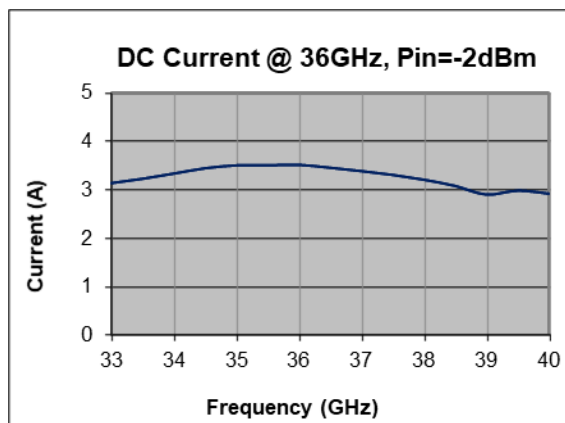
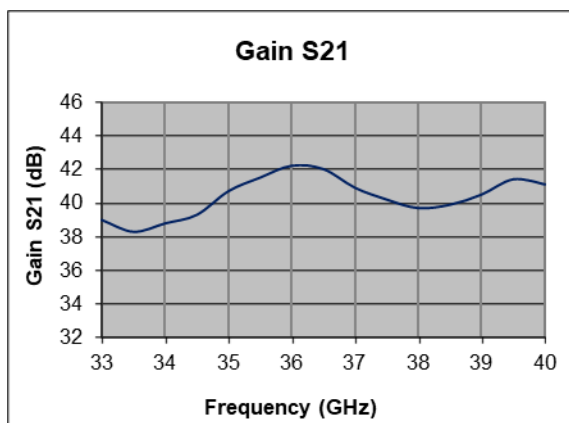
Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, DC Supply = +8VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	33		40
Gain S ₂₁				
f = 33GHz	dB	37	39.0	
f = 35GHz	dB	37	40.7	
f = 37GHz	dB	37	41.0	
f = 39GHz	dB	37	40.6	
f = 40GHz	dB	37	40.8	
Gain Flatness	dB		±1.5	±2.5
Output Power P _{1dB}	dBm	+32	+33	
Output Power P _{SAT}	dBm	+34	+34.5	
Reverse Isolation S ₁₂	dB	-45	-50	
Input VSWR S ₁₁			2.0:1	
Output VSWR S ₂₂			2.0:1	
DC Power Supply - voltage	V		+8	+9
DC Power Supply - current	A		3.7	4.0
Size (RF/DC feedthrough excluded)	Inch (mm)	2.20"x2.20"x0.47" (56x56x12mm)		

33 – 40GHz 2W RF Power Amplifier

WARNING: MUST USE HEAT SINK WITH COOLING FAN OR MOUNT ON LARGE METAL PLATE TO MAINTAIN BASE PLATE TEMPERATURE UNDER +55 °C

Typical Performance @ +25°C



33 – 40GHz 2W RF Power Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+13V
RF Input Power	+20dBm
Operating Temperature	-20 °C to +55 °C
Storage Temperature	-65 °C to +150 °C

ESD Sensitive Material



Outline (mm)

