

32 – 36GHz 0.5W RF Power Amplifier

Features

- Frequency Range: 32-36GHz
- Gain: 27dB min.
- P_{1dB}: +27dBm typ.
- P_{SAT}: +27dBm (0.5W) min.
- DC Power: +12V @ 1.1A
- RF Connector: 2.92mm-female

Description

HD34033 is a high performance 0.5W RF Power Amplifier, with standard frequency range of 32 to 36GHz.



Photo

Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, DC Supply = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	32		36
Gain S ₂₁	dB	27	30	
Gain Flatness	dB		±1.0	±1.5
Output Power P _{1dB}	dBm		+27	
Output Power P _{SAT}	dBm	+27	+28	
Noise Figure	dB		4	5.5
Input VSWR S ₁₁		2.7:1	2.0:1	
Output VSWR S ₂₂		2.7:1	2.0:1	
DC Power Supply - voltage	V	+8	+12	+13
DC Power Supply - current	A		0.9	1.1
Size (RF/DC feedthrough excluded)	Inch (mm)	2.36"x1.77"x0.55" (60x45x14mm)		

WARNING: MUST USE HEAT SINK WITH COOLING FAN OR MOUNT ON LARGE METAL PLATE TO MAINTAIN BASE PLATE TEMPERATURE UNDER +50°C

32 – 36GHz 0.5W RF Power Amplifier

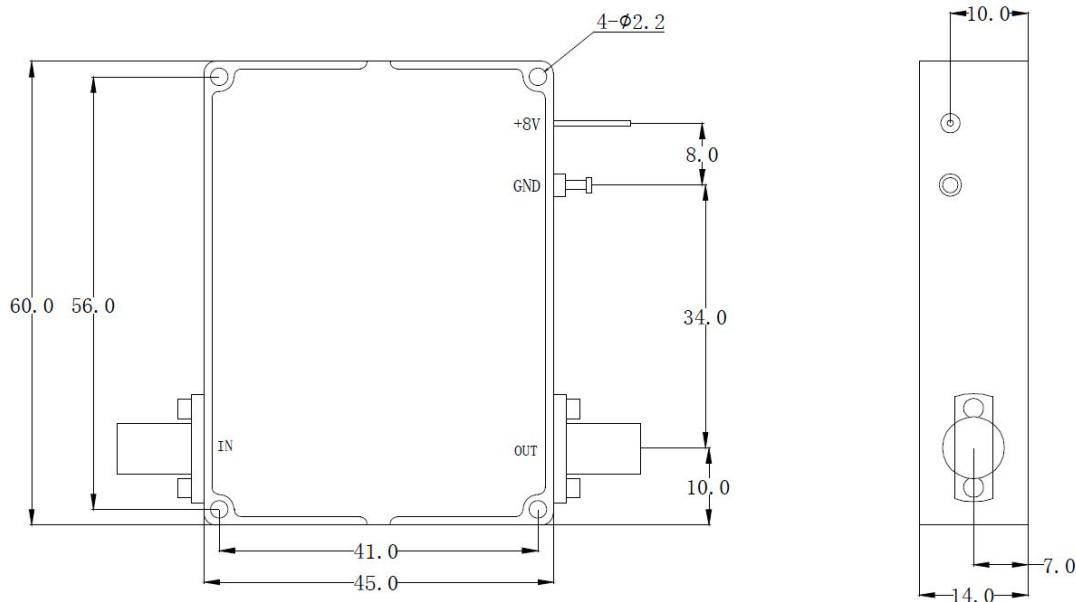
Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+30V
RF Input Power	+15dBm
Operating Temperature	-20 °C to +70 °C
Storage Temperature	-65 °C to +125 °C

ESD Sensitive Material



Outline (mm)



RF Connector Input: 2.92mm Female
RF Connector Output: 2.92mm Female