

HD26478

698-757MHz 10W RF Power Amplifier

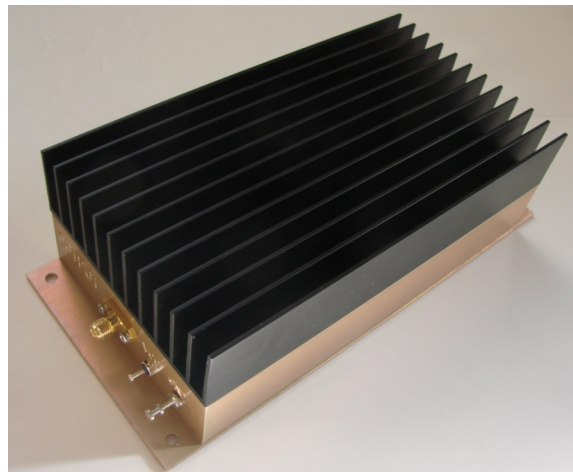
Features

- Frequency Range: 698-757MHz
- Gain: 40dB
- P_{out} : +40dBm
- P_{sat} : +41dBm
- IP3: +50dBm
- DC Power: 12V
- SMA Connector

Performance measured @ 727.5MHz

Description

HD26478 is a 10Watt (+40dBm) output linear RF Power Amplifier operating from single 12V DC power supply with frequency range in 698-757MHz.



Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \Omega$, $V_{cc} = +12V$

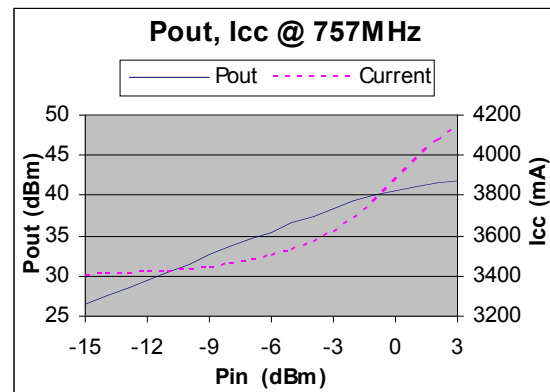
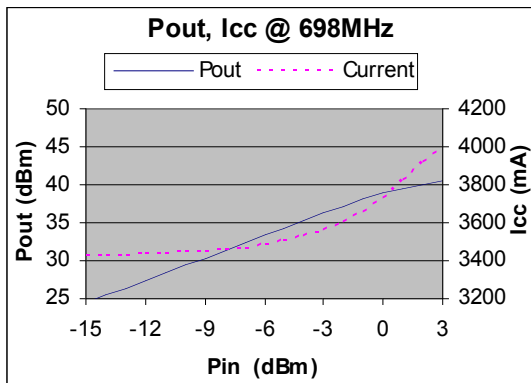
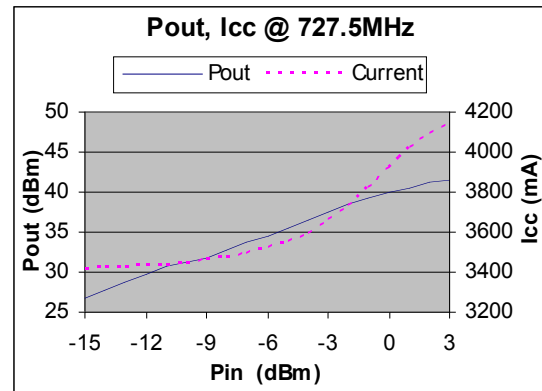
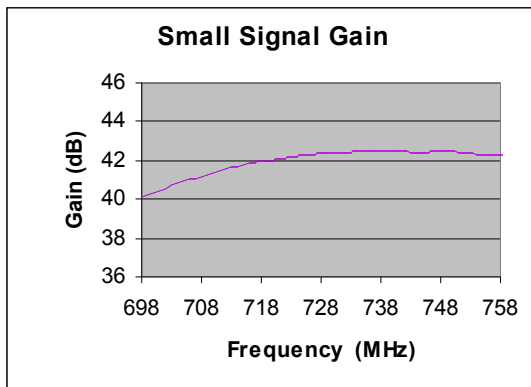
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	698		757
Small Signal Gain	dB	39	42	
Output Power P_{out} @ $P_{in} = 1\text{dBm}$	dBm	+39	+40	
Saturated Power P_{sat} @ $P_{in} = +3\text{dBm}$	dBm		+41	
Output IP3 *	dBm		+50	
Reverse Isolation	dB		-60	
Efficiency at $P_{out} = +40\text{dBm}$	%		23	
VSWR Input			1.3:1	1.5:1
DC Power Supply	V		+12	
Supply Current	mA		3900	
Size (Excluding SMA Connector)	inch	7.000" x 3.250" x 2.000"		
Weight	Oz.	24 (680g)		

HD26478

698-757MHz 10W RF Power Amplifier

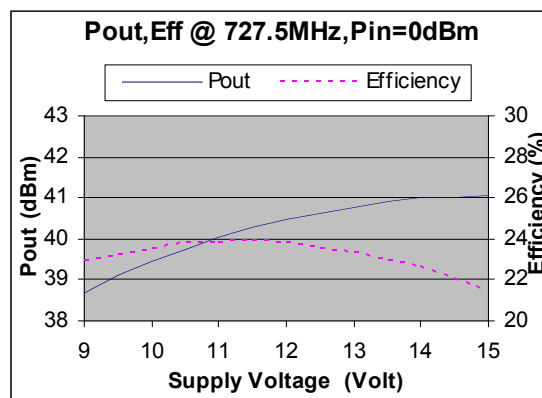
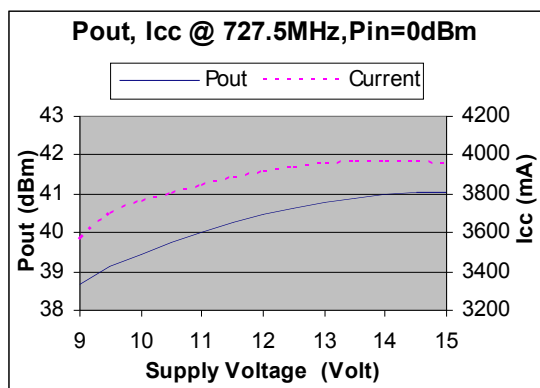
* OIP3 measured with two tones at an output power of +34dBm/tone separated by 1MHz. Using Power Meter to measure total P_{out} . $OIP3 = P_{out} + (\Delta IM)/2 - 3dB$, where ΔIM is the signal level difference (in dB) between the fundamental and the IM3.

Typical Performance @ +25 °C



HD26478

698-757MHz 10W RF Power Amplifier



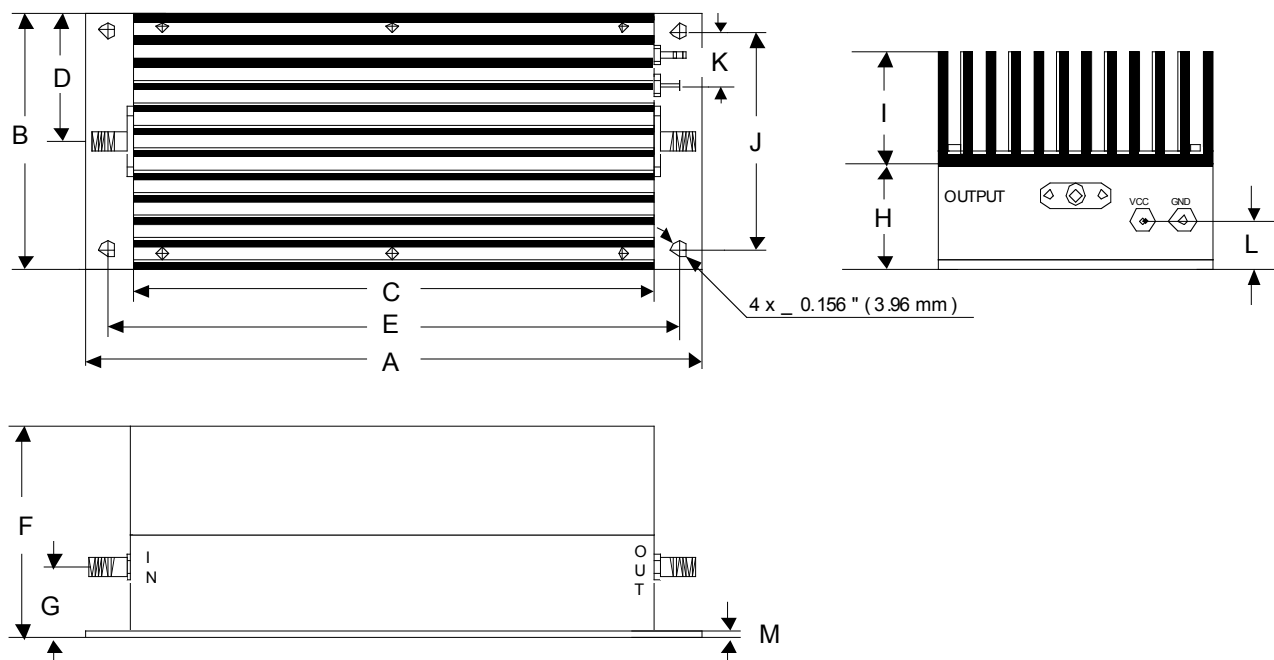
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+16V
Operating Temperature	-30 °C to +65 °C
Storage Temperature	-55 °C to +100 °C

HD26478

698-757MHz 10W RF Power Amplifier

Outline



	A	B	C	D	E	F	G	H	I
Inch	7.000	3.250	6.000	1.625	6.500	2.000	0.650	1.000	1.000
mm	177.80	82.55	152.40	41.28	165.10	50.80	16.51	25.40	25.40
	J	K	L	M					
Inch	2.750	0.625	0.450	0.090					
mm	69.85	15.88	11.43	2.29					