

## HD26476

## 869-894MHz 10W RF Power Amplifier

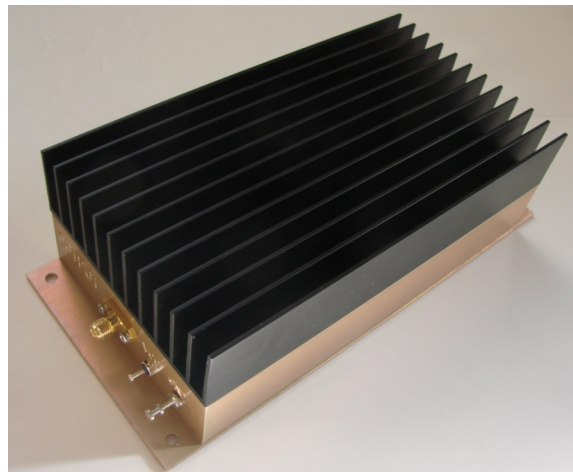
### Features

- Frequency Range: 869-894MHz
- Gain: 40dB
- $P_{out}$ : +40dBm
- $P_{sat}$ : +42dBm
- IP3: +50dBm
- DC Power: 12V
- SMA Connector

Performance measured @ 881.5MHz

### Description

HD26476 is a 10Watt (+40dBm) output linear RF Power Amplifier operating from single 12V DC power supply with frequency range in 869-894MHz.



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

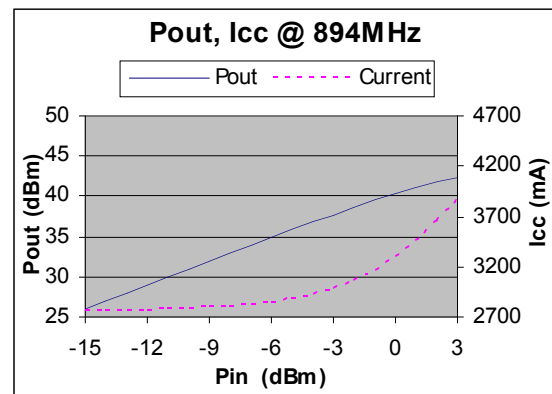
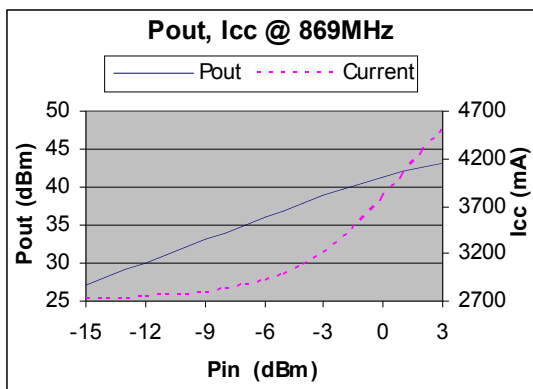
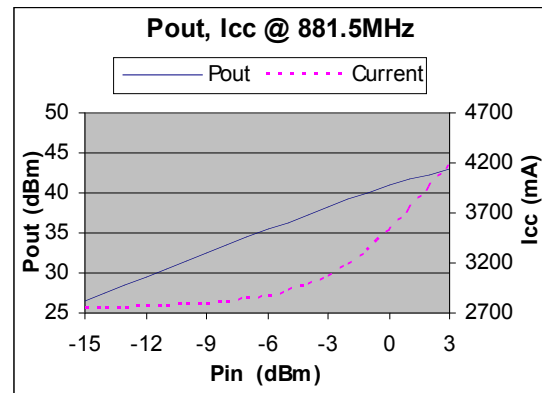
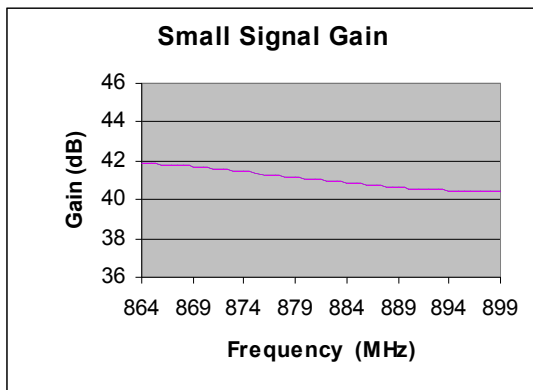
| Parameter                                    | Unit | Minimum                  | Typical | Maximum |
|----------------------------------------------|------|--------------------------|---------|---------|
| Frequency Range                              | MHz  | 869                      |         | 894     |
| Small Signal Gain                            | dB   | 40                       | 41      |         |
| Output Power $P_{out}$ @ $P_{in} = 0dBm$     | dBm  | +40                      | +41     |         |
| Saturated Power $P_{sat}$ @ $P_{in} = +3dBm$ | dBm  |                          | +42     |         |
| Output IP3 *                                 | dBm  |                          | +50     |         |
| Reverse Isolation                            | dB   |                          | -60     |         |
| Efficiency at $P_{out} = +41dBm$             | %    |                          | 28      |         |
| VSWR Input                                   |      |                          | 1.3:1   | 1.5:1   |
| DC Power Supply                              | V    |                          | +12     |         |
| Supply Current                               | mA   |                          | 3500    |         |
| Size (Excluding SMA Connector)               | inch | 7.000" x 3.250" x 2.000" |         |         |
| Weight                                       | Oz.  | 24 (680g)                |         |         |

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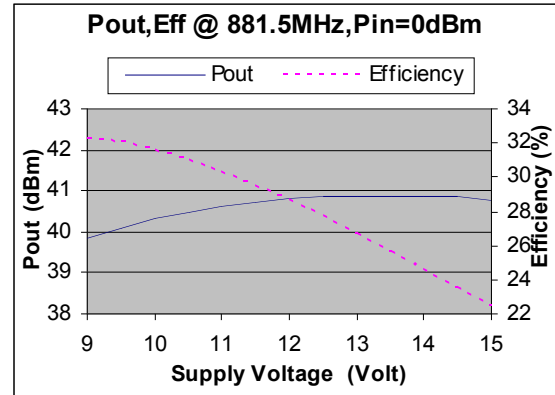
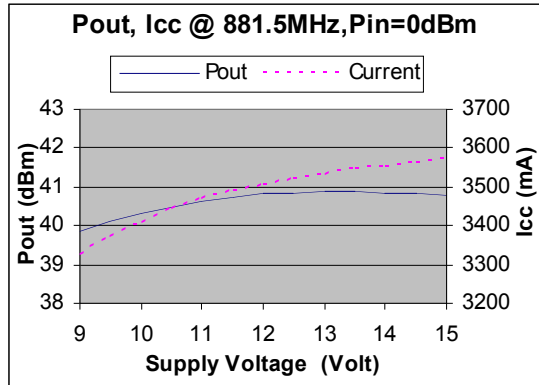
\* OIP3 measured with two tones at an output power of +34dBm/tone separated by 1MHz. Using Power Meter to measure total  $P_{out}$ .  $OIP3 = P_{out} + (\Delta IM)/2 - 3dB$ , where  $\Delta IM$  is the signal level difference (in dB) between the fundamental and the IM3.

### Typical Performance @ +25 °C



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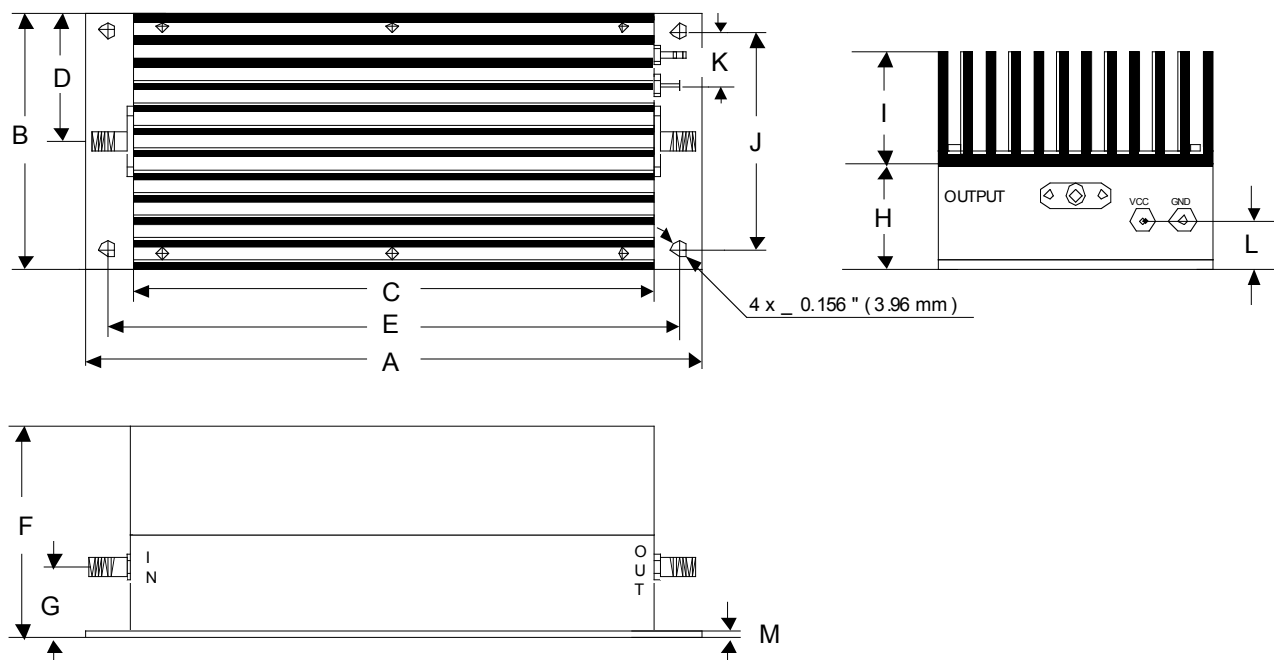
### Absolute Maximum Ratings

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

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## Outline



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