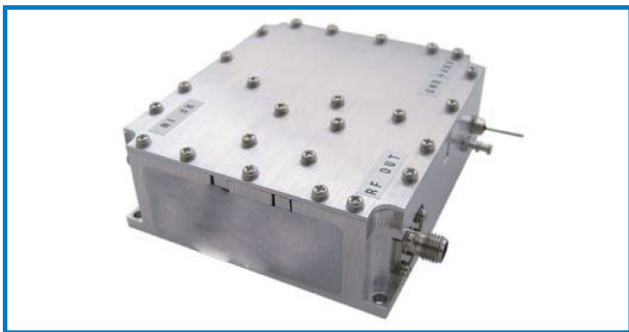


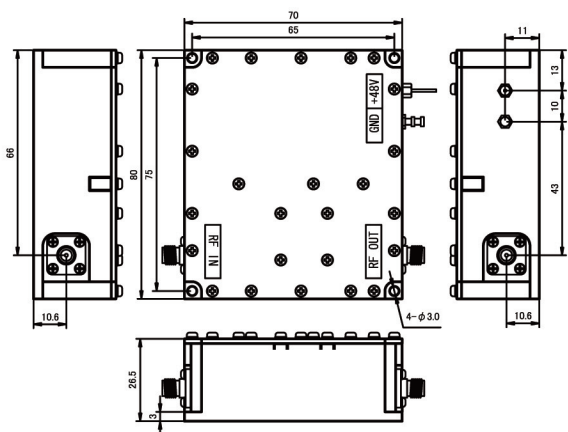
# ULTRA BROADBAND AMPLIFIER

## HD30063



### OUTLINE DRAWING

※IN MILLIMETERS



Base plate must be grounded and mounted to heat sink to guarantee operation up to maximum temperature.

- ULTRA BROADBAND GaN 5W AMPLIFIER
- Broadband Frequency: 20MHz ~ 6000MHz
- Output Power : 5W (typ.) @Psat.
- Gain Flatness :  $\pm 2.0$  dB (max.)

### SPECIFICATIONS @ +25°C

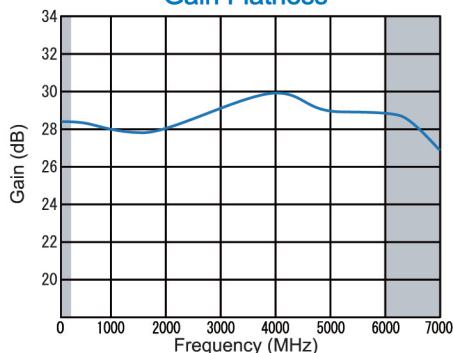
|                                           |                                                                        |
|-------------------------------------------|------------------------------------------------------------------------|
| Frequency Range                           | : 20MHz ~ 6000MHz                                                      |
| Small Signal Gain                         | : +28.0dB (typ.) $\Delta 1$<br>: +26.0dB (min.) $\Delta 1$             |
| Gain Flatness                             | : $\pm 2.0$ dB (max.)                                                  |
| Output Power                              | : 1W (min.) @1dB Comp.<br>: 2W (min.) @3dB Comp.<br>: 5W (typ.) @Psat. |
| Output I.C.P.                             | : +40.0dBm (typ.)                                                      |
| Noise Figure                              | : 12.0dB (max.)                                                        |
| Impedance                                 | : 50 $\Omega$                                                          |
| Input Return Loss                         | : -7.0 (max.)                                                          |
| Output Return Loss                        | : -5.0 (max.)                                                          |
| Maximum RF Input Power                    | : +18.0dBm                                                             |
| Maximum RF Output Power                   | : +39.0dBm                                                             |
| DC Supply Input                           | : +48V $\pm 3\%$<br>: 1.5A (max.)                                      |
| Operating Temperature (@Base Plate temp.) | : -15°C to +45°C                                                       |
| Storage Temperature                       | : -15°C to +65°C                                                       |
| Connectors                                | : RF - IN SMA - FEMALE<br>: RF - OUT SMA - FEMALE                      |
| Size                                      | : (W)80mm $\times$ (D)70mm $\times$ (H)26.5mm                          |
| Weight                                    | : 250g (typ.)                                                          |

### HOW TO ORDER

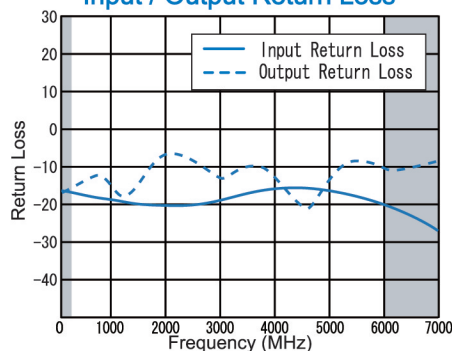
Model Name  
HD30063

### TYPICAL PERFORMANCE (Temp @+25°C)

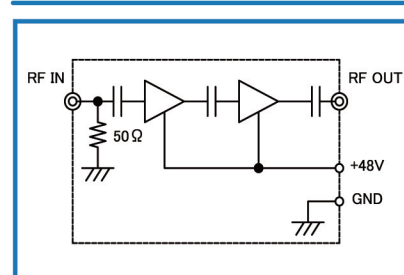
Gain Flatness



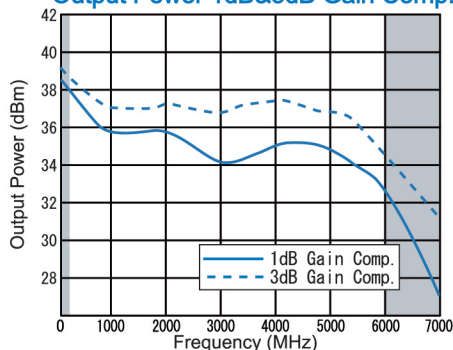
Input / Output Return Loss



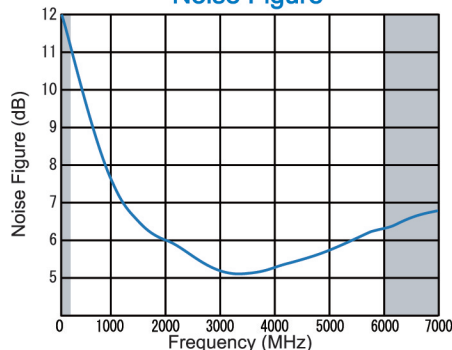
SCHEMATIC



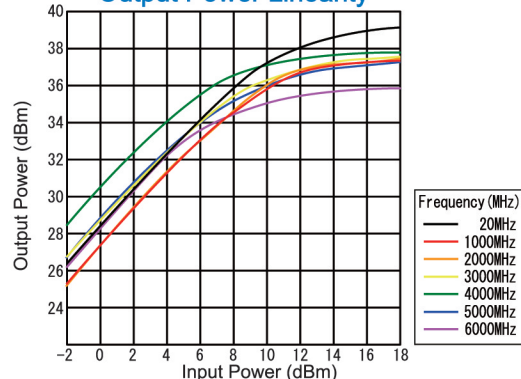
Output Power 1dB&3dB Gain Comp.



Noise Figure



Output Power Linearity



HD Communications Corp.  
332-C Dante Ct. Holbrook NY 11741

Tel: 631-588-3877, Fax: 631-648-0518, sales@hdcom.com