

查询TGA1342供应商

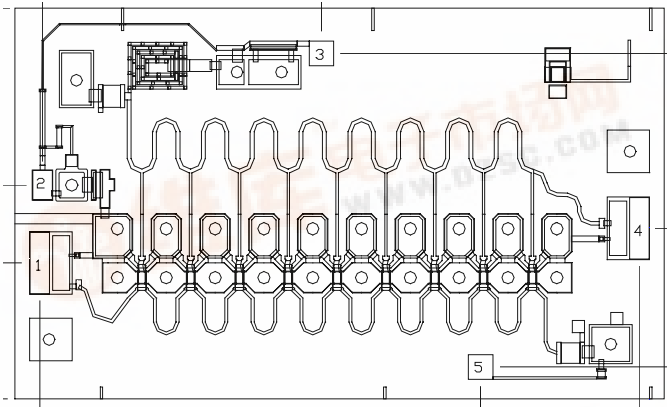


捷多邦, 专业PCB打样工厂, 24小时加急出货

Advance Product Information

2 -20 GHz Wideband AGC Amplifier

TGA1342-EPU



Key Features and Performance

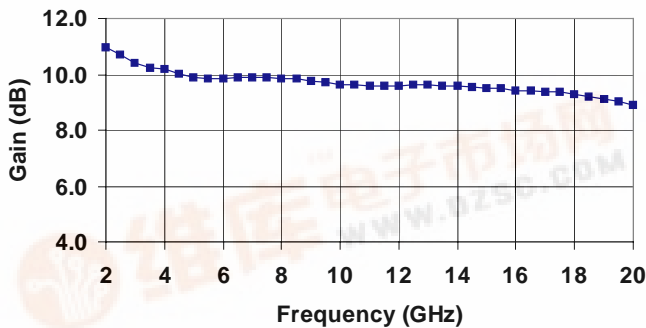
- 0.5 um MESFET Technology
- 9 dB Nominal Gain
- 3.5 dB NF Typical Midband
- 17.5 dBm Nominal Pout @ P1dB
- Bias 5-8V @ 60 mA
- Dimensions 3.378mm x 2.032mm

Primary Applications

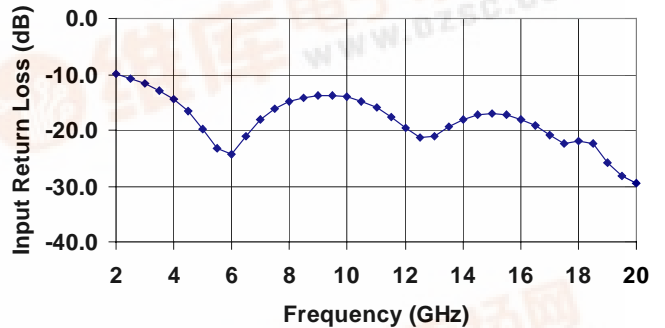
- Wideband Gain Block Amplifier
- Wideband Low Noise Amplifier

Typical Electrical Characteristics

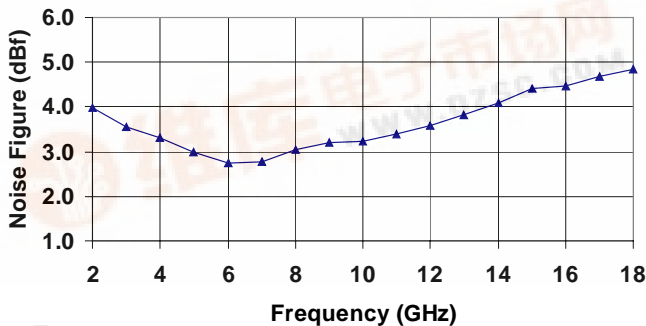
S21 Gain (dB)
VD=5v Id=60ma Temp=25C



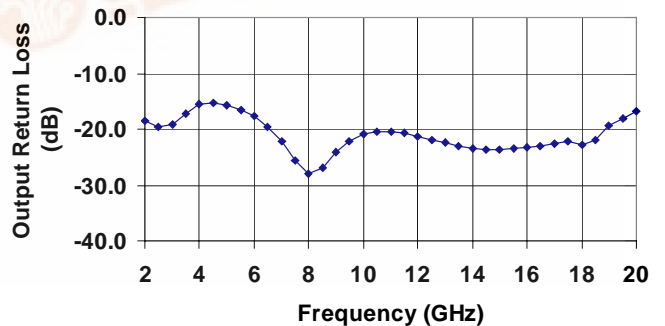
S11 Input Return Loss (dB)
VD=5v Id=60ma Temp=25C



Noise Figure (dB)
VD=6v Id=60ma Temp=25C



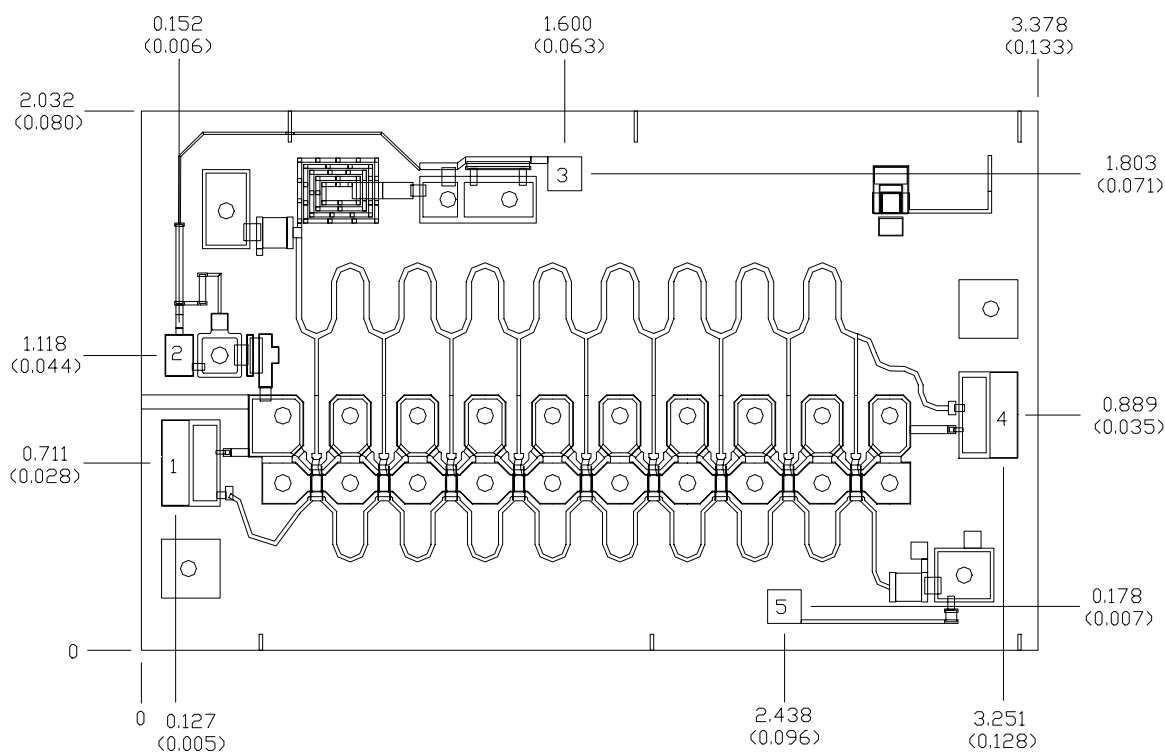
S22 Output Return Loss (dB)
VD=5v Id=60ma Temp=25C



Note: Devices designated as EPU are typically early in their characterization process prior to finalizing all electrical and process specifications. Specifications are subject to change without notice



Mechanical Characteristics



Units: millimeters (inches)

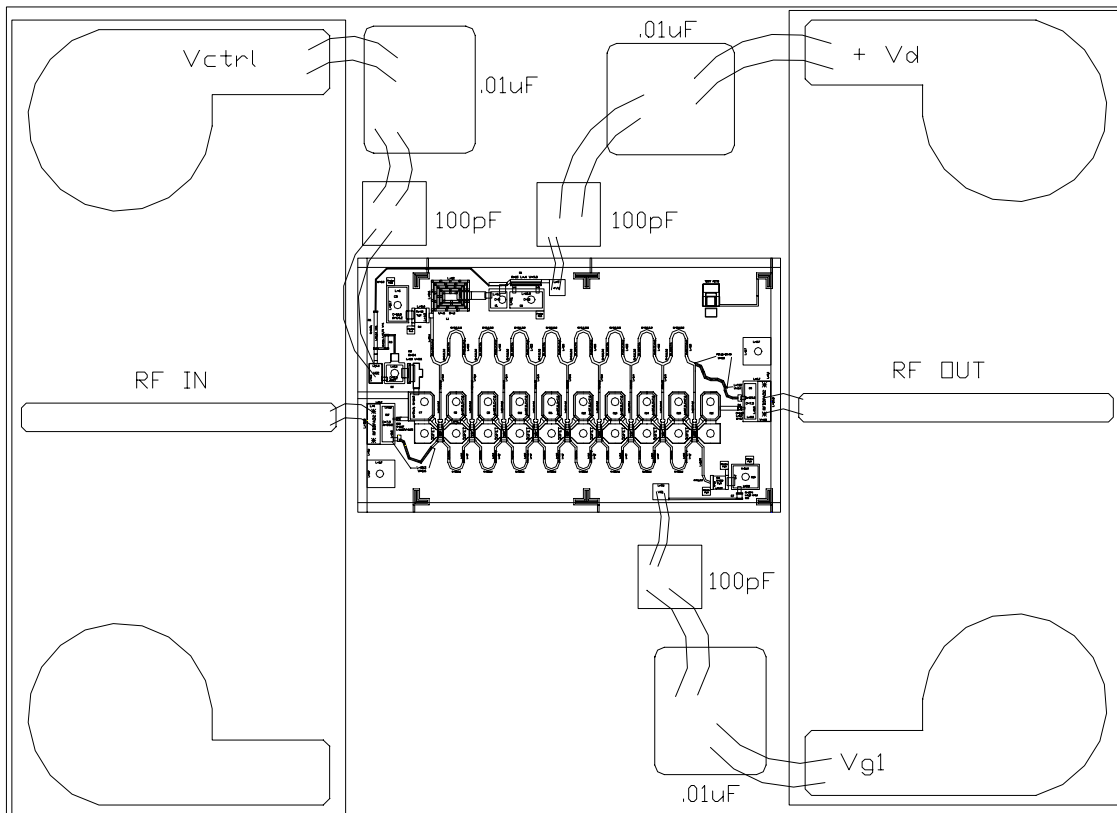
Thickness: 0.1016 (0.004) (reference only)

Chip edge to bond pad dimensions are shown to center of bond pads.

Chip size tolerance: ± 0.0508 (0.002)

Bond Pad #1 (RF Input)	0.102 × 0.330 (0.004 × 0.013)
Bond Pad #2 (Vg2) (Vcontrol)	0.102 × 0.152 (0.004 × 0.006)
Bond Pad #3 (Vd)	0.127 × 0.127 (0.005 × 0.005)
Bond Pad #4 (RF Output)	0.102 × 0.330 (0.004 × 0.013)
Bond Pad #5 (Vg1)	0.127 × 0.127 (0.005 × 0.005)

Chip Assembly and Bonding Diagram



Reflow process assembly notes:

- AuSn (80/20) solder with limited exposure to temperatures at or above 300°C
- alloy station or conveyor furnace with reducing atmosphere
- no fluxes should be utilized
- coefficient of thermal expansion matching is critical for long-term reliability
- storage in dry nitrogen atmosphere

Component placement and adhesive attachment assembly notes:

- vacuum pencils and/or vacuum collets preferred method of pick up
- avoidance of air bridges during placement
- force impact critical during auto placement
- organic attachment can be used in low-power applications
- curing should be done in a convection oven; proper exhaust is a safety concern
- microwave or radiant curing should not be used because of differential heating
- coefficient of thermal expansion matching is critical

Interconnect process assembly notes:

- thermosonic ball bonding is the preferred interconnect technique
- force, time, and ultrasonics are critical parameters
- aluminum wire should not be used
- discrete FET devices with small pad sizes should be bonded with 0.0007-inch wire
- maximum stage temperature: 200°C