GaAs pHEMT MMIC MEDIUM POWER AMPLIFIER, 6.5 - 13.5 GHz

Absolute Maximum Ratings

Drain Bias Voltage (Vdd)	+6 Vdc
Gate Bias Voltage (Vgg1,Vgg2)	-8 to 0 Vdc
RF Input Power (RFIN)(Vdd = +5 Vdc)	+15 dBm
Channel Temperature	175 °C
Continuous Pdiss (T = 85 °C) (derate 8.5 mW/°C above 85 °C)	0.76 W
Thermal Resistance (channel to ground paddle)	118.2 °C/W
Storage Temperature	-65 to +150 °C
Operating Temperature	-40 to +85 °C

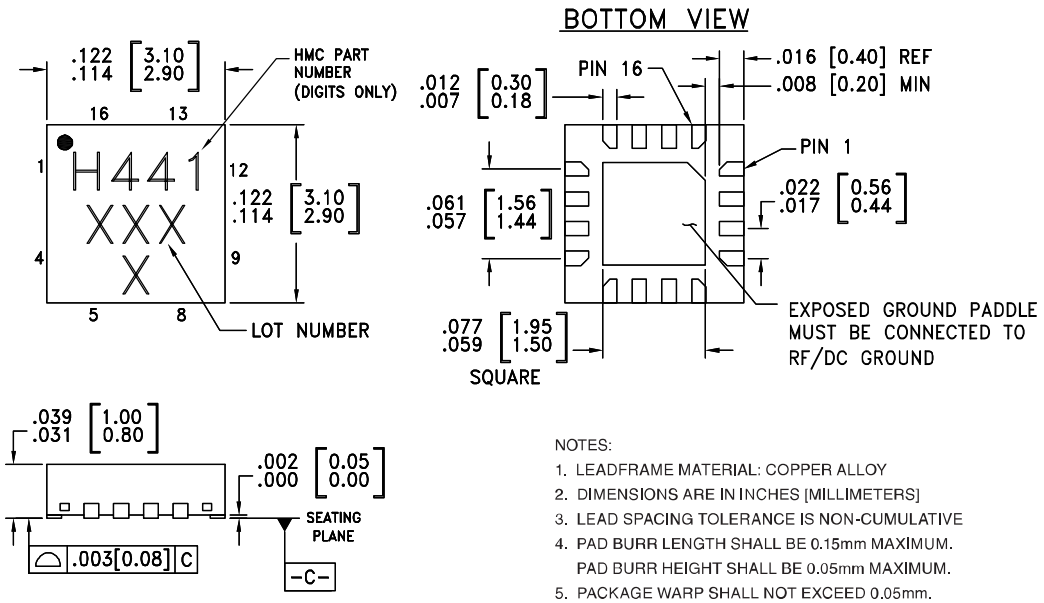
Typical Supply Current vs. Vdd

Vdd (V)	Idd (mA)
+5.5	92
+5.0	90
+4.5	88
+3.3	83
+3.0	82

Note: Amplifier will operate over full voltage range shown above

ELECTROSTATIC SENSITIVE DEVICE
OBSERVE HANDLING PRECAUTIONS

Outline Drawing



NOTES:

1. LEADFRAME MATERIAL: COPPER ALLOY
2. DIMENSIONS ARE IN INCHES [MILLIMETERS]
3. LEAD SPACING TOLERANCE IS NON-CUMULATIVE
4. PAD BURR LENGTH SHALL BE 0.15mm MAXIMUM. PAD BURR HEIGHT SHALL BE 0.05mm MAXIMUM.
5. PACKAGE WARP SHALL NOT EXCEED 0.05mm.
6. ALL GROUND LEADS AND GROUND PADDLE MUST BE SOLDERED TO PCB RF GROUND.
7. REFER TO HITTITE APPLICATION NOTE FOR SUGGESTED LAND PATTERN.

Package Information

Part Number	Package Body Material	Lead Finish	MSL Rating	Package Marking [3]
HMC441LP3	Low Stress Injection Molded Plastic	Sn/Pb Solder	MSL1 [1]	441 XXXX
HMC441LP3E	RoHS-compliant Low Stress Injection Molded Plastic	100% matte Sn	MSL1 [2]	441 XXXX

[1] Max peak reflow temperature of 235 °C
[2] Max peak reflow temperature of 260 °C
[3] 4-Digit lot number XXXX

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