

RoHS V

FRACTIONAL-N PLL WITH INTEGRATED VCO 1025 - 1150, 2050 - 2300, 4100 - 4600 MHz

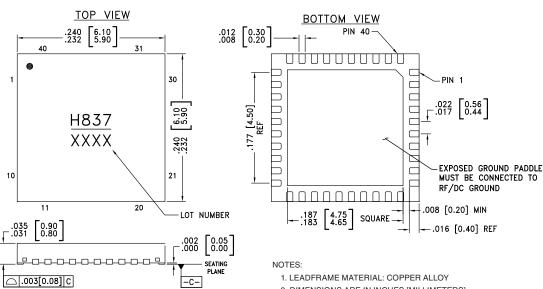
Absolute Maximum Ratings

AVDD, RVDD, DVDD3V, VCCPD, VCCHF, VCCPS	-0.3V to +3.6V			
VPPCP, VDDCP, VCC1	-0.3V to +5.8V			
VCC2	-0.3V to +5.5V			
Operating Temperature	-40°C to +85°C			
Storage Temperature	-65°C to 125°C			
Maximum Junction Temperature	125 °C			
Thermal Resistance (R _{TH}) (junction to ground paddle)	20 °C/W			
Reflow Soldering				
Peak Temperature	260°C			
Time at Peak Temperature	40 sec			
ESD Sensitivity (HBM)	Class 1B			

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Stresses above those listed under Absolute Maximum Ratings may cause permanent damage to the device. This is a stress rating only; functional operation of the device at these or any other conditions above those indicated in the operational section of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Outline Drawing



- 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 PCB LAND PATTERN.

Package Information

Part Number	Package Body Material	Lead Finish	MSL Rating	Package Marking [1]
HMC837LP6CE	RoHS-compliant Low Stress Injection Molded Plastic	100% matte Sn	MSL1	H837 XXXX

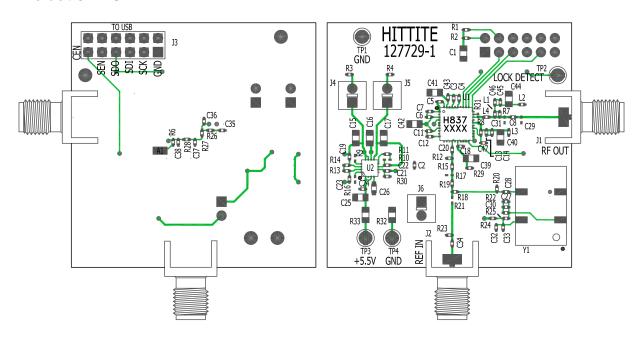
[1] 4-Digit lot number XXXX





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Evaluation PCB



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The circuit board used in the application should use RF circuit design techniques. Signal lines should have 50 Ohm impedance while the package ground leads and exposed paddle should be connected directly to the ground plane similar to that shown. A sufficient number of via holes should be used to connect the top and bottom ground planes. The evaluation circuit board shown is available from Hittite upon request.

Evaluation PCB Schematic

To view this <u>Evaluation PCB Schematic</u> please visit <u>www.hittite.com</u> and choose HMC837LP6CE from the "Search by Part Number" pull down menu to view the product splash page.

Evaluation Order Information

Item	Contents	Part Number
Evaluation DCB Only	HMC837LP6CE F ₀ /2 & F ₀ Evaluation PCB	EVAL01-HMC837LP6CE
Evaluation PCB Only	HMC837LP6CE 2xF ₀ Evaluation PCB	EVAL02-HMC837LP6CE
Eurhalia Kit	HMC837LP6CE F _o /2 & F _o Evaluation PCB USB Interface Board 6' USB A Male to USB B Female Cable CD ROM (Contains User Manual, Evaluation PCB Schematic, Evaluation Software, Hittite PLL Design Software)	131995-HMC837LP6CE
Evaluation Kit	HMC837LP6CE 2xF _o Evaluation PCB USB Interface Board 6' USB A Male to USB B Female Cable CD ROM (Contains User Manual, Evaluation PCB Schematic, Evaluation Software, Hittite PLL Design Software)	131997-HMC837LP6CE



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FRACTIONAL-N PLL WITH INTEGRATED VCO 1025 - 1150, 2050 - 2300, 4100 - 4600 MHz

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ANALOGDEVICES

Notes: