



SMA4306 — Si Monolithic Linear IC Oscillator IC for Laser Diode Noise Suppression Applications

Features

- Frequency specification with LC : Added LC sets the operating frequency
- Ultra small package : 1.6×1.6×0.56mm
- Halogen free compliance

Specifications

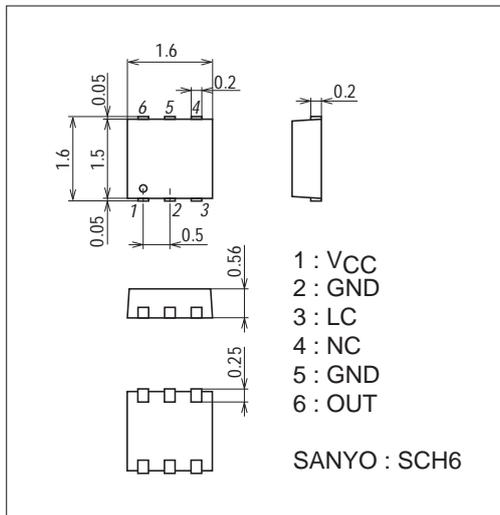
Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------|------------------|------------|-------------|------|
| Supply Voltage | V _{CC} | | 6 | V |
| Circuit Current | I _{CC} | | 50 | mA |
| Power Dissipation | P _D | | 280 | mW |
| Operating Temperature | T _{opr} | | -40 to +85 | °C |
| Storage Temperature | T _{stg} | | -55 to +150 | °C |

Package Dimensions

unit : mm (typ)

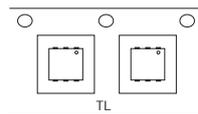
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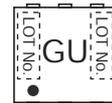
Product & Package Information

- Package : SCH6
- JEITA, JEDEC : -
- Minimum Packing Quantity : 5,000pcs./real

Packing Type: TL



Marking



SMA4306

Recommended Operating Conditions at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|----------------|--------|------------|---------|-----|-----|------|
| | | | min | typ | max | |
| Supply Voltage | VCC | | 3 | 5 | 5.5 | V |

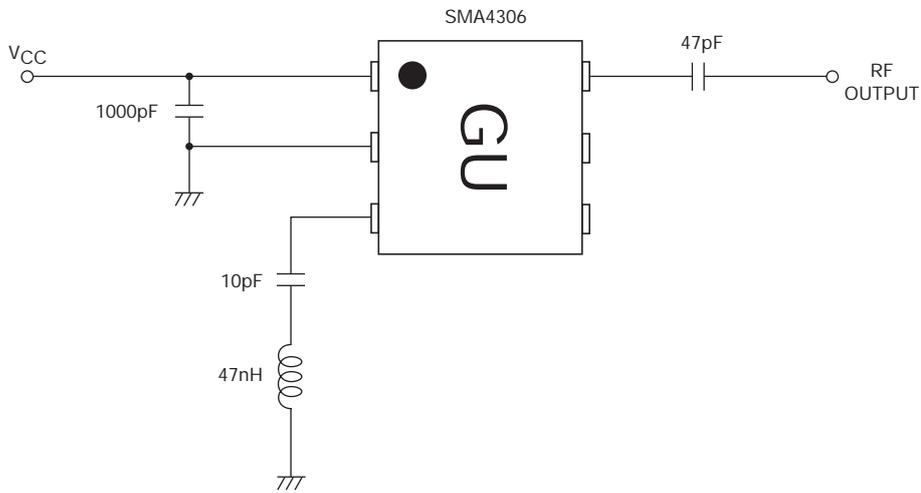
Electrical Characteristics at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|------------------------------------|--------|--|---------|-----|-----|------|
| | | | min | typ | max | |
| Circuit Current | ICC | VCC=5V, RL=50Ω, fosc=400MHz | 29 | 34 | 39 | mA |
| Oscillating Power | Posc | VCC=5V, RL=50Ω, fosc=400MHz | 4.5 | 6.4 | 8.5 | dBm |
| Tolerance of Oscillating Frequency | fmod | VCC=5V, RL=50Ω, Specified Test Circuit (L=47nH, C=10pF) | -10 | | 10 | % |

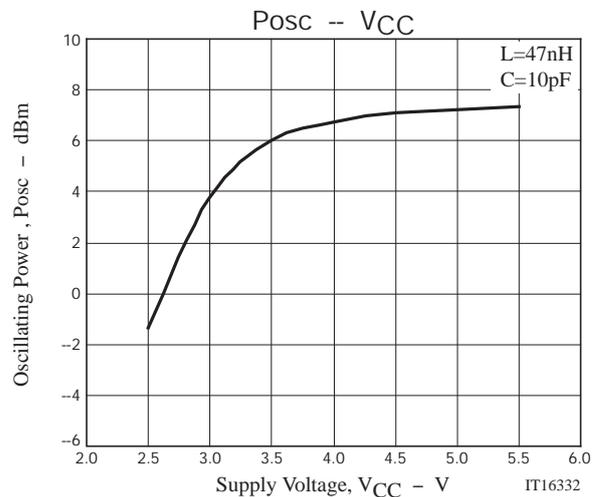
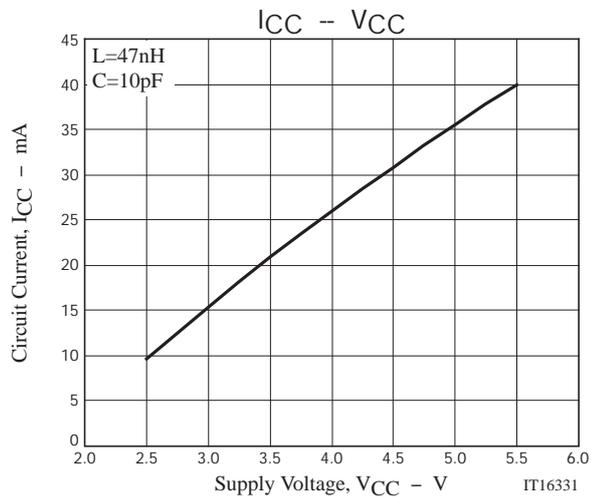
Note 1 : Oscillation frequency mainly depends on the external LC (The LC is attached additionally to the LC terminal in series).

Note 2 : Recommended oscillation frequency 350MHz to 450MHz .

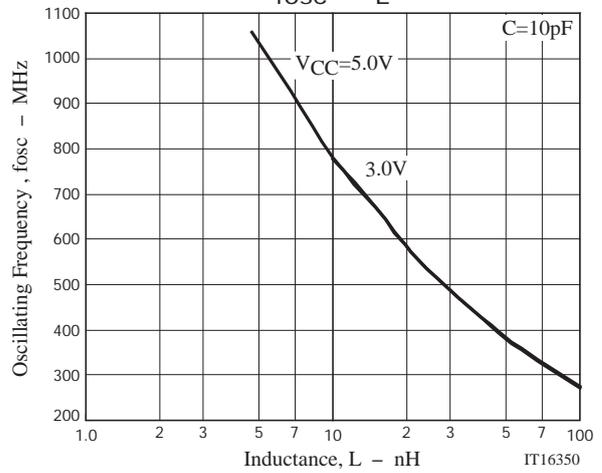
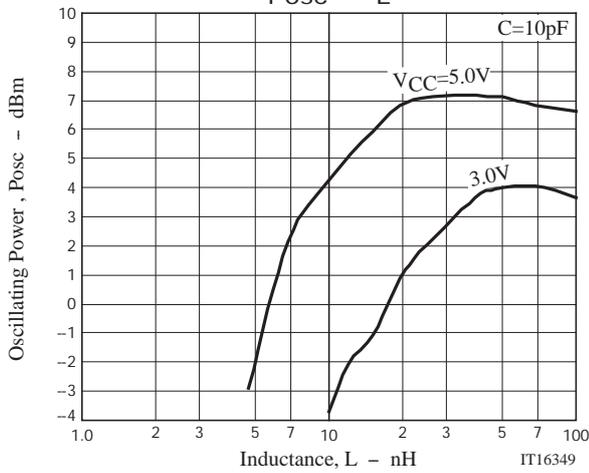
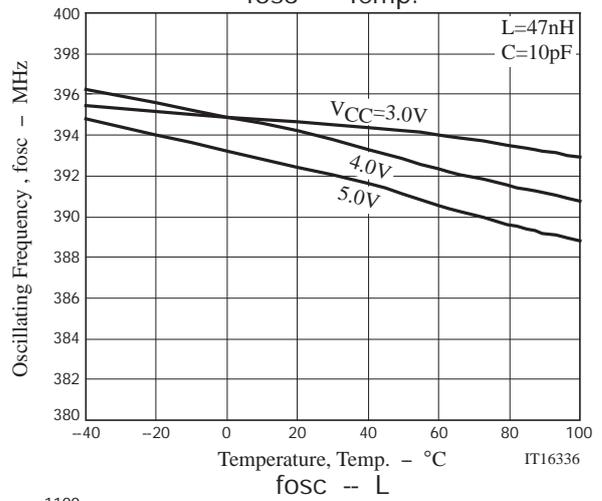
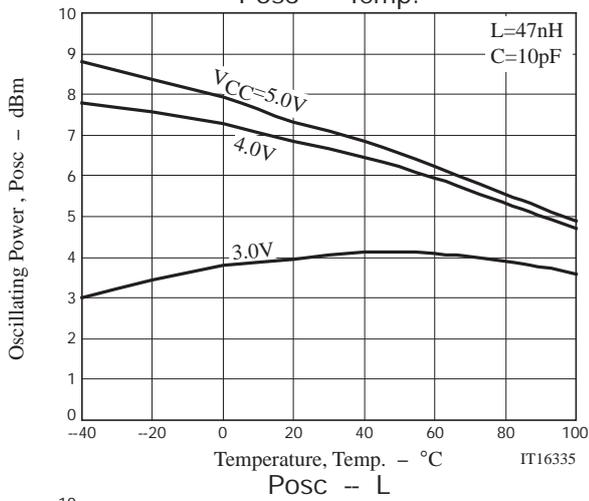
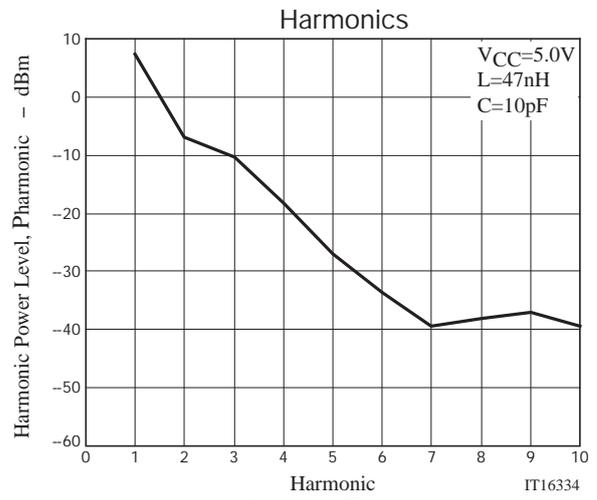
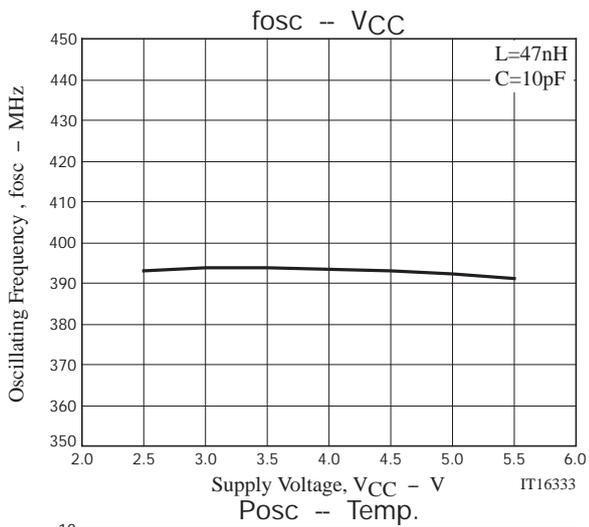
Test Circuit



IT15713



SMA4306



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