



ON Semiconductor®

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# SMA4306

## MMIC

### Oscillator, 5V, 6.4dBm@400MHz, SCH6

#### 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

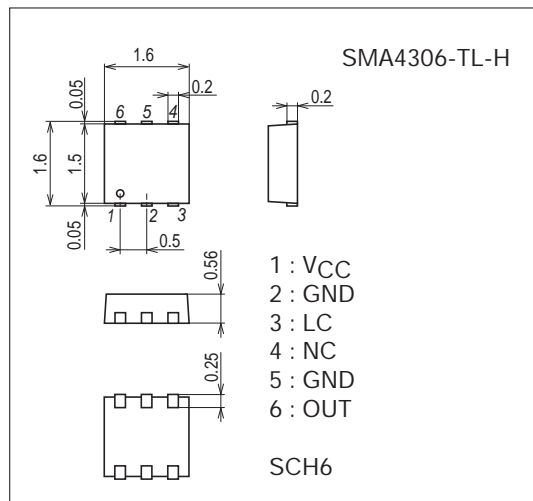
Parameter	Symbol	Conditions	Ratings	Unit
Supply Voltage	V <sub>CC</sub>		6	V
Circuit Current	I <sub>CC</sub>		50	mA
Power Dissipation	P <sub>D</sub>		280	mW
Operating Temperature	T <sub>opr</sub>		-40 to +85	°C
Storage Temperature	T <sub>stg</sub>		-55 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

#### Package Dimensions

unit : mm (typ)

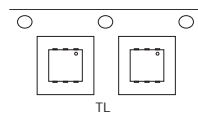
7028-008



#### Product & Package Information

- Package : SCH6
- JEITA, JEDEC : SOT-563
- Minimum Packing Quantity : 5,000 pcs./reel

#### 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

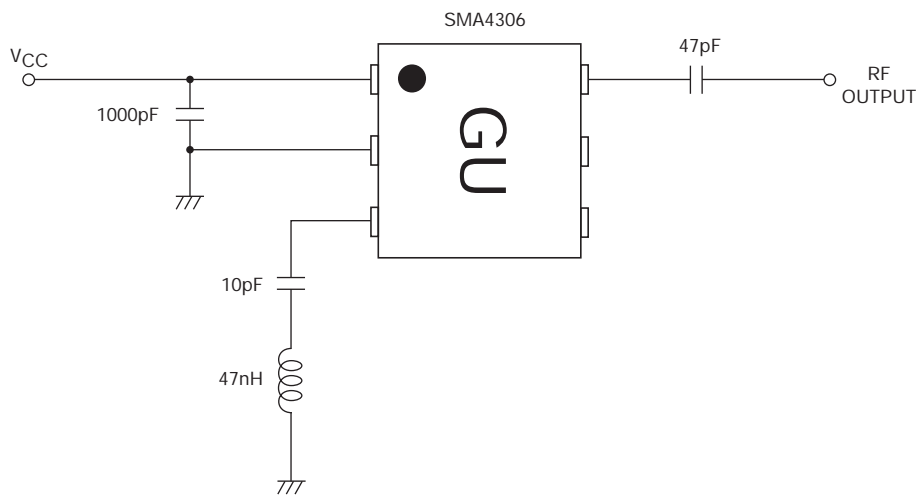
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Circuit Current	ICC	VCC=5V, RL=50Ω, fosc=400MHz	29	34	39	mA
Oscillating Power	Posc		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 .

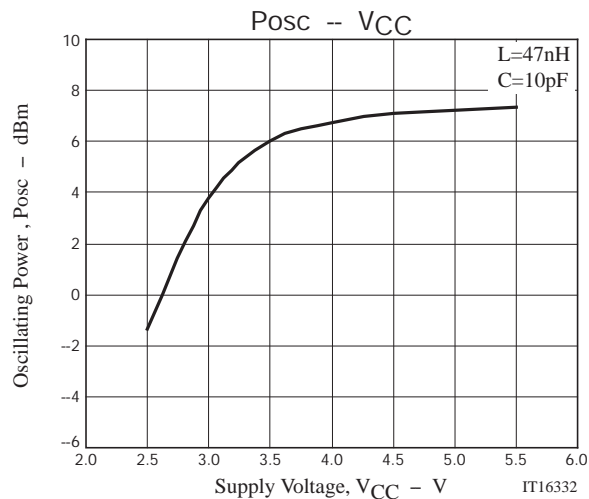
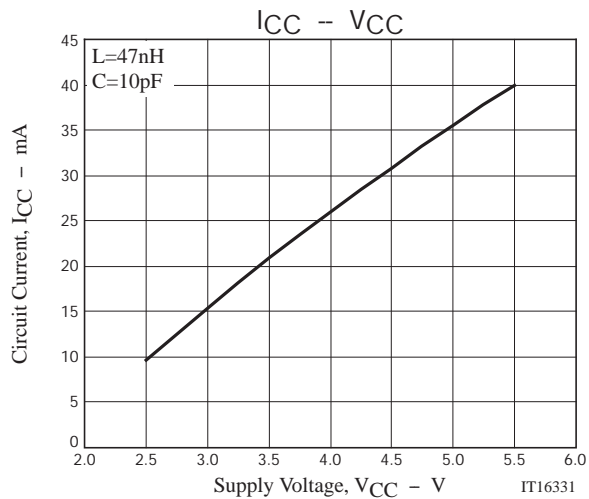
Test Circuit

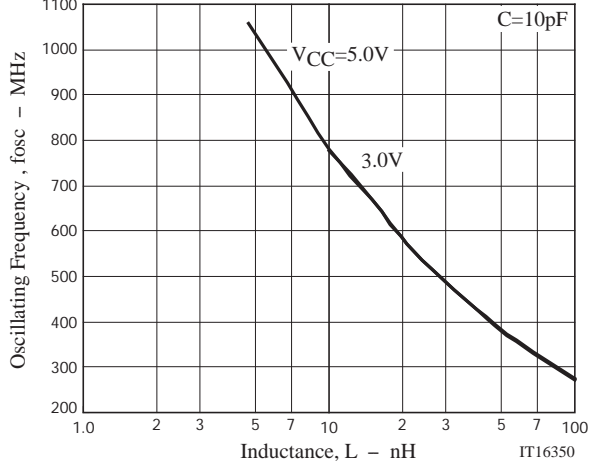
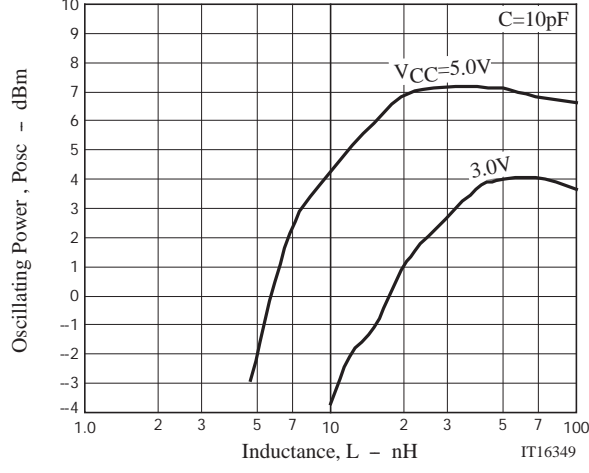
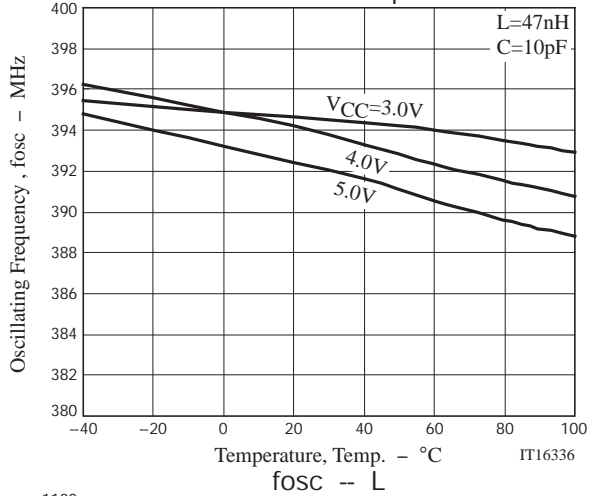
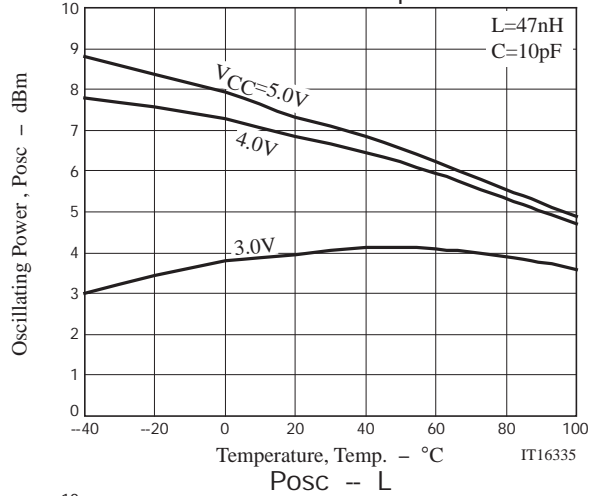
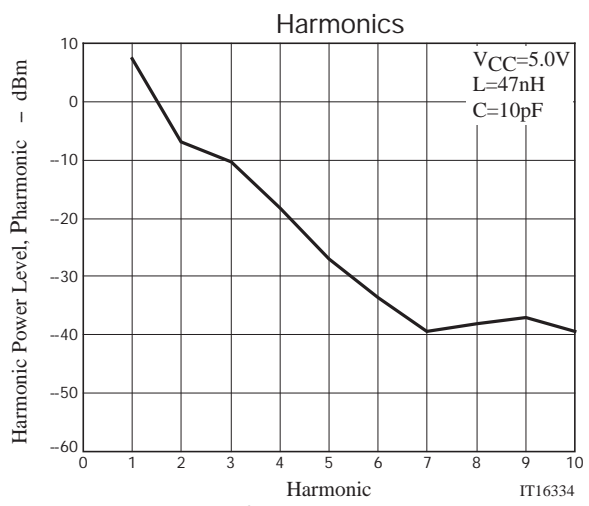
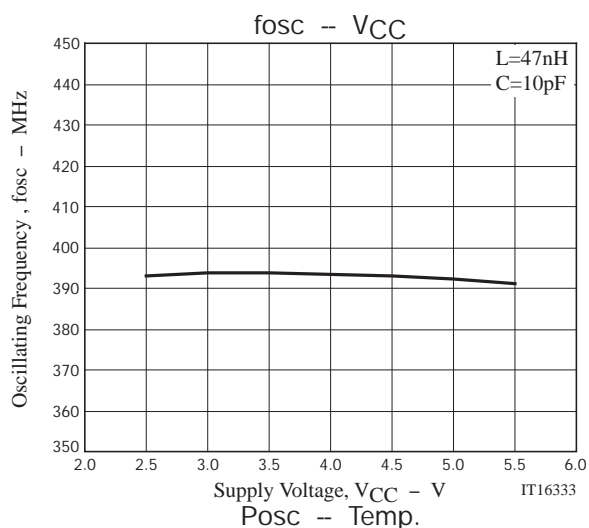


IT15713

Ordering Information

Device	Package	Shipping	memo
SMA4306-TL-H	SCH6	5,000pcs./reel	Pb Free and Halogen Free

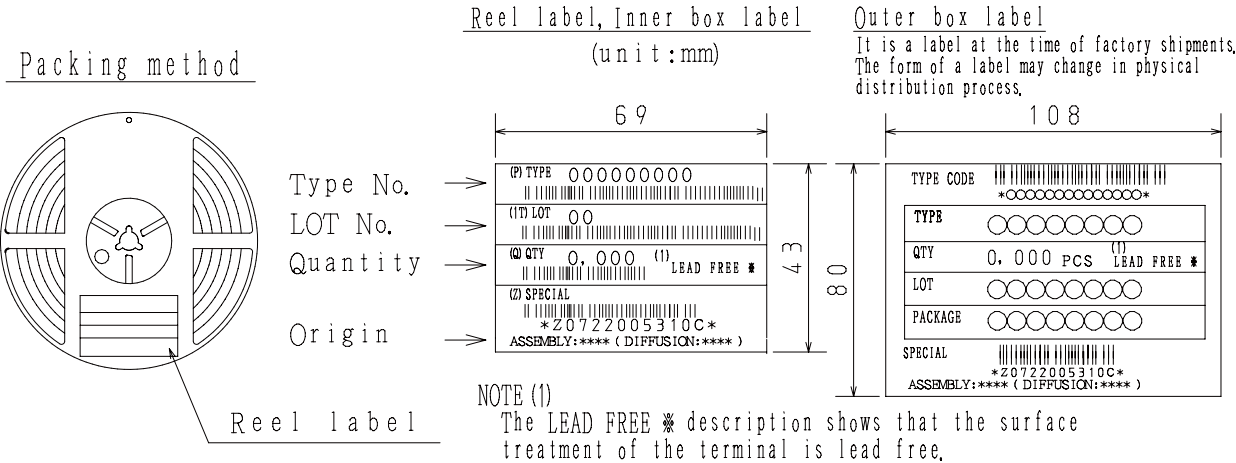




Taping Specification  
SMA4306-TL-H

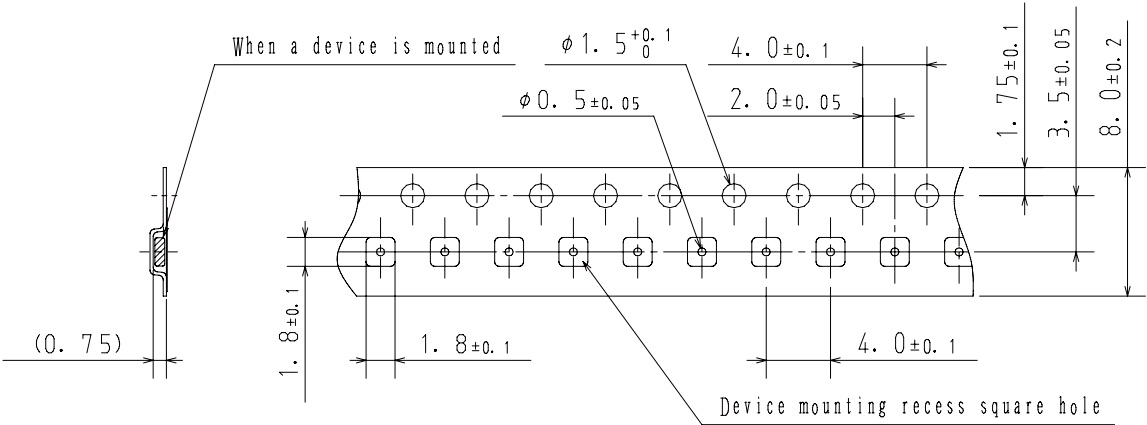
1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
SCH6	SCH6	5,000	25,000	150,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

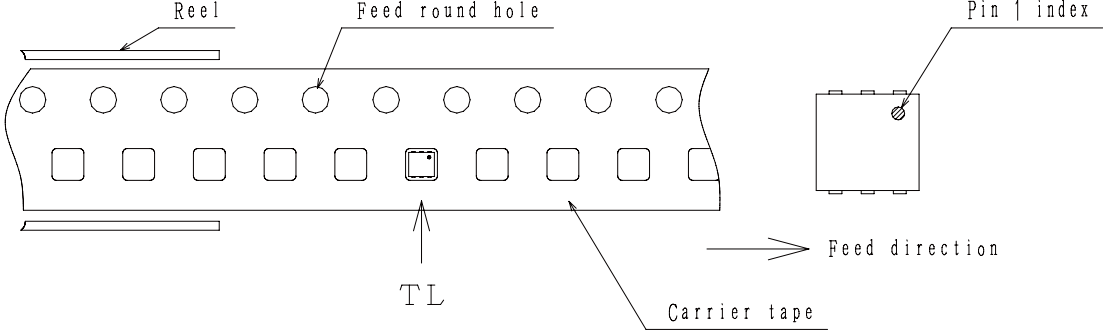


2. Taping configuration

2-1. Carrier tape size (unit:mm)

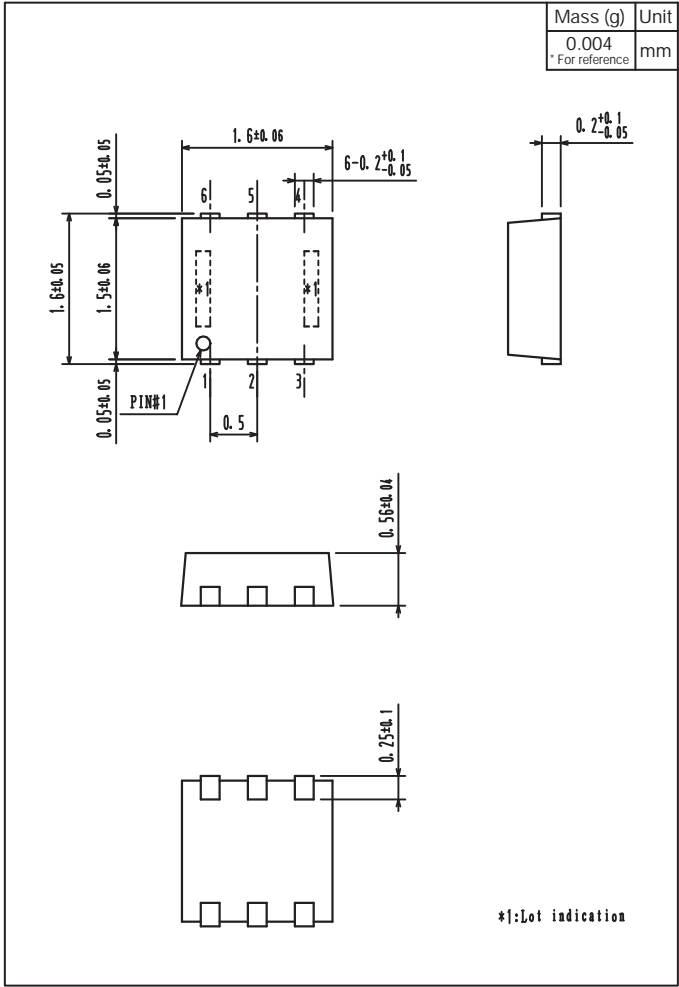


2-2. Device placement direction

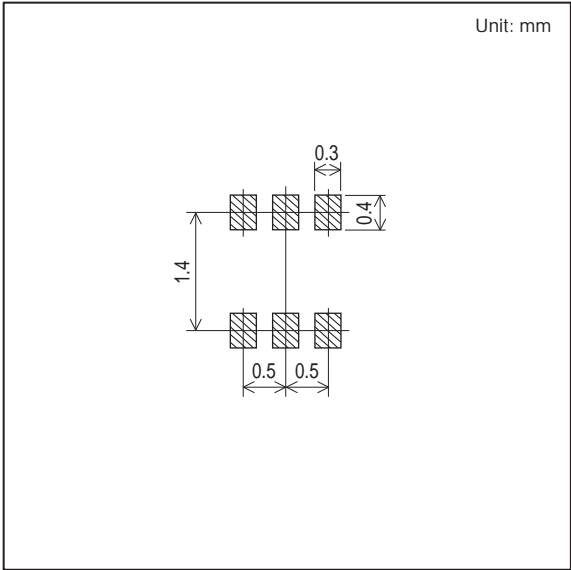


Those with pin 1 index on the feed hole side.....TL

Outline Drawing  
SMA4306-TL-H



Land Pattern Example



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