



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

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

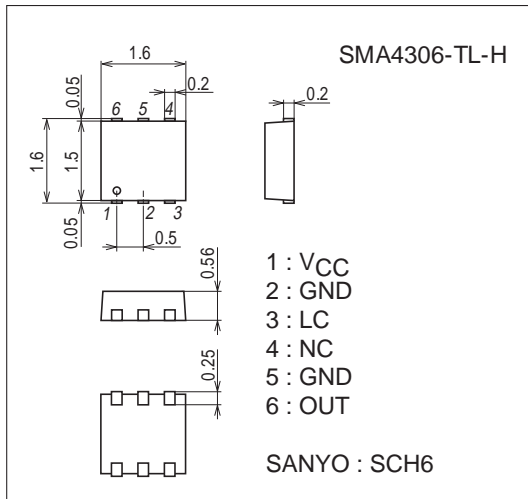
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Supply Voltage	VCC		6	V
Circuit Current	ICC		50	mA
Power Dissipation	PD		280	mW
Operating Temperature	Topr		-40 to +85	°C
Storage Temperature	Tstg		-55 to +150	°C

Package Dimensions

unit : mm (typ)

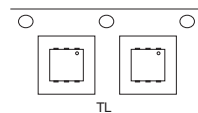
7028-008



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

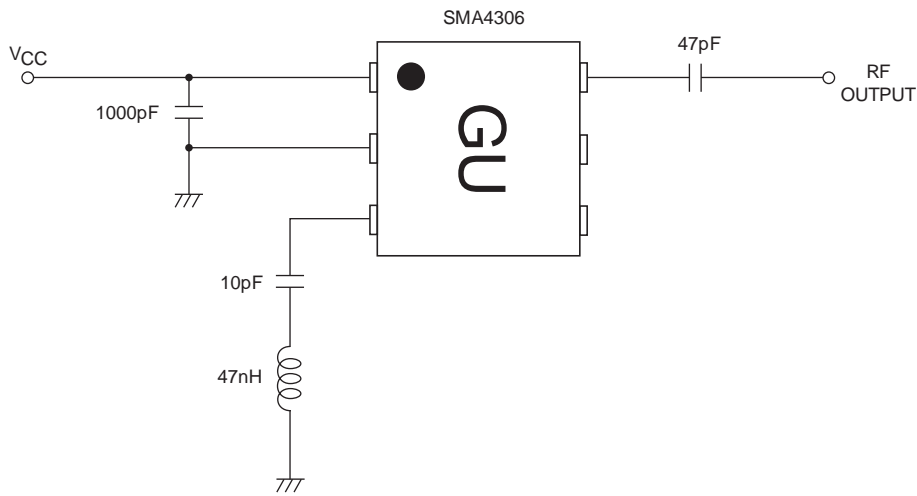
Electrical Characteristics at Ta=25°C

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

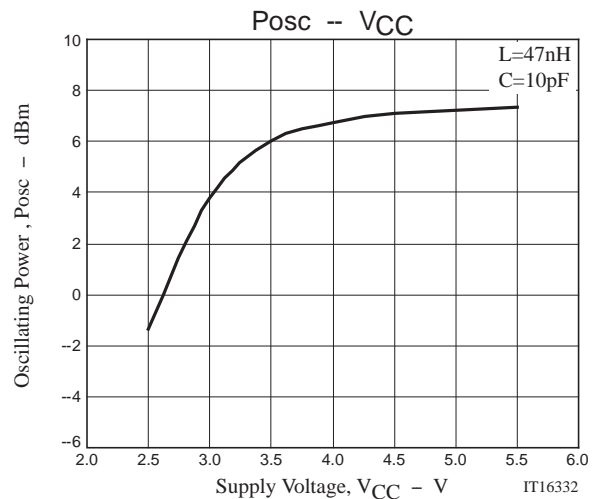
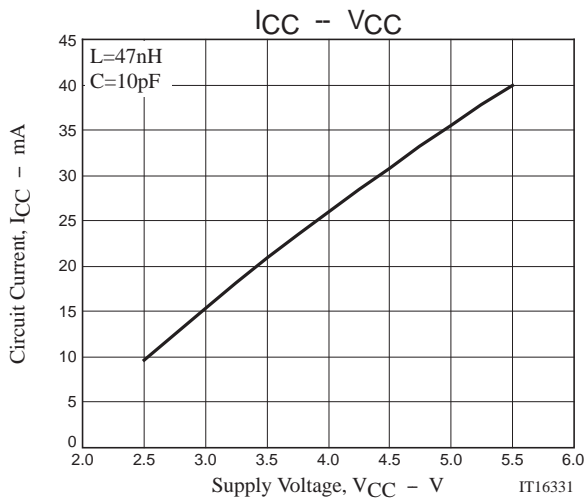
Test Circuit



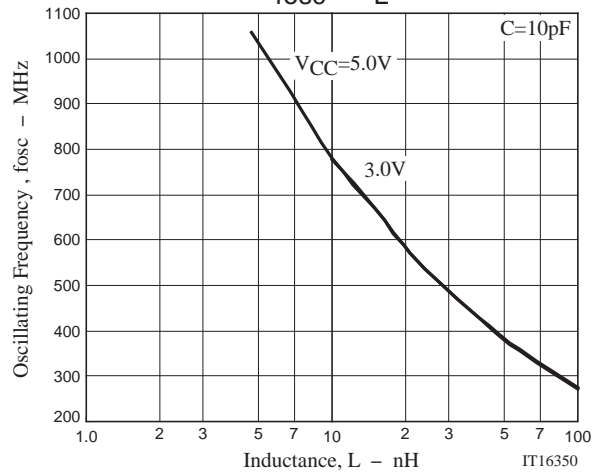
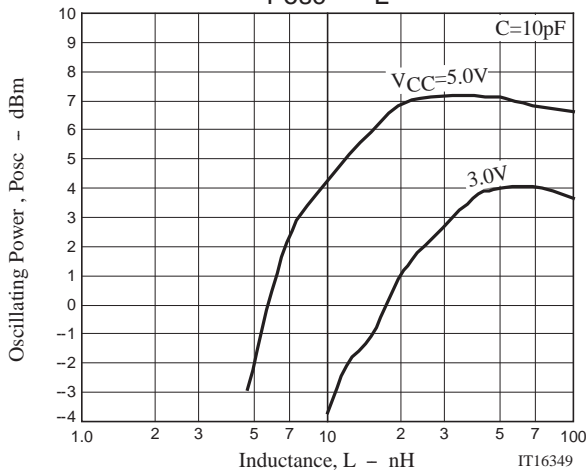
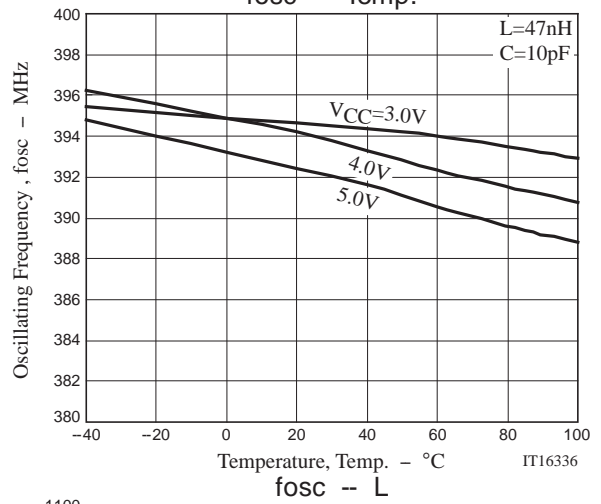
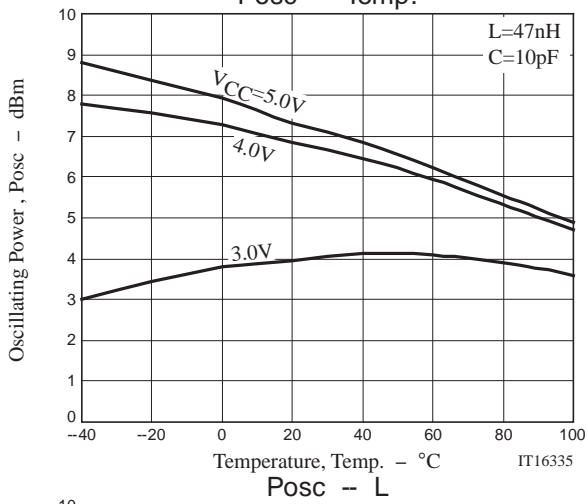
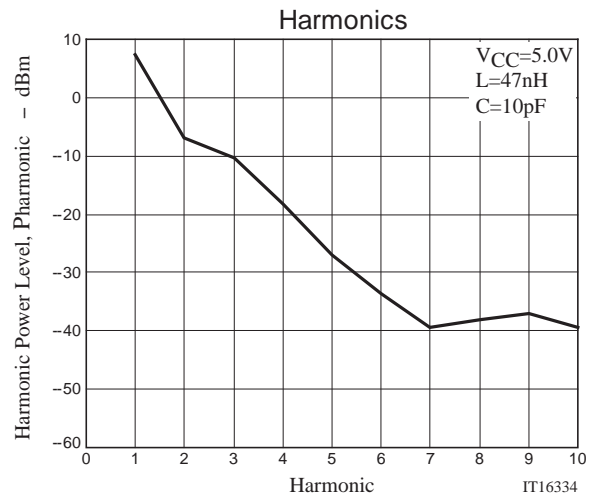
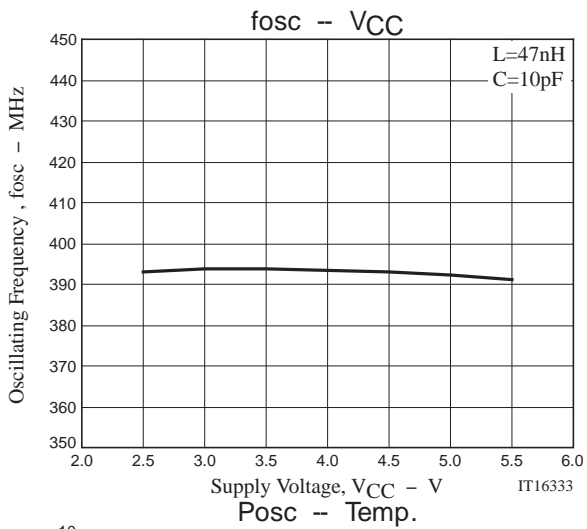
IT15713

Ordering Information

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



SMA4306



Taping Specification

SMA4306-TL-H

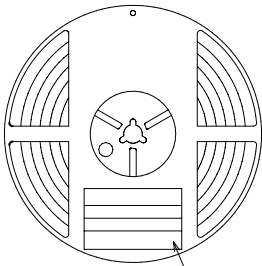
1. Packing Format

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

Reel label, Inner box label
(unit : mm)

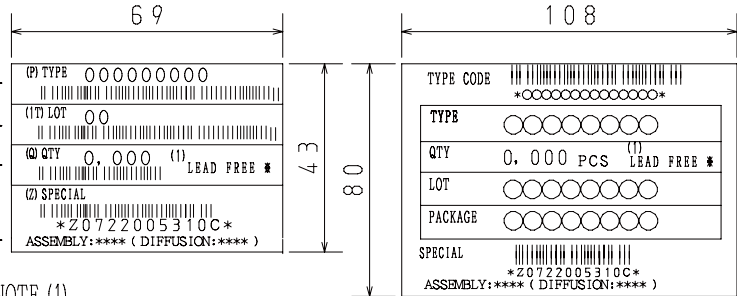
Outer box label
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Type No. →
LOT No. →
Quantity →
Origin →

Reel label



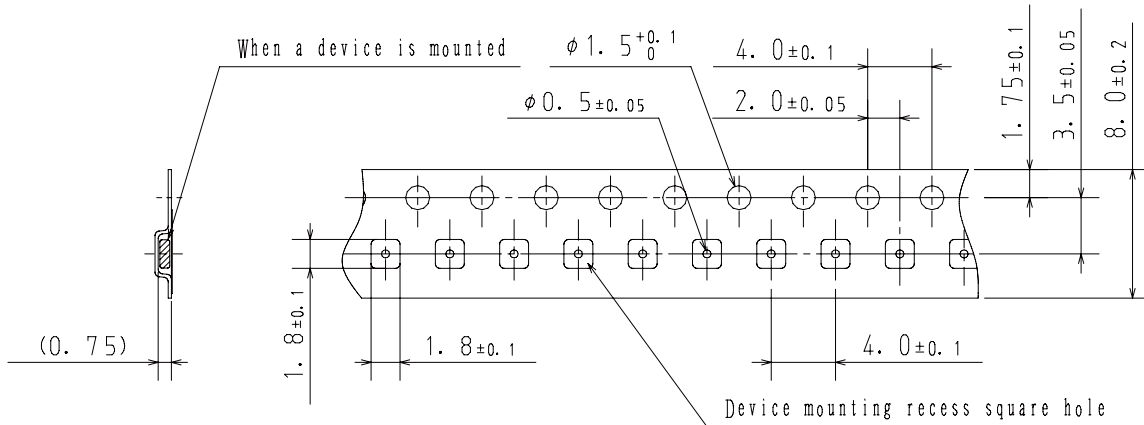
NOTE (1)

The LEAD FREE * description shows that the surface treatment of the terminal is lead free.

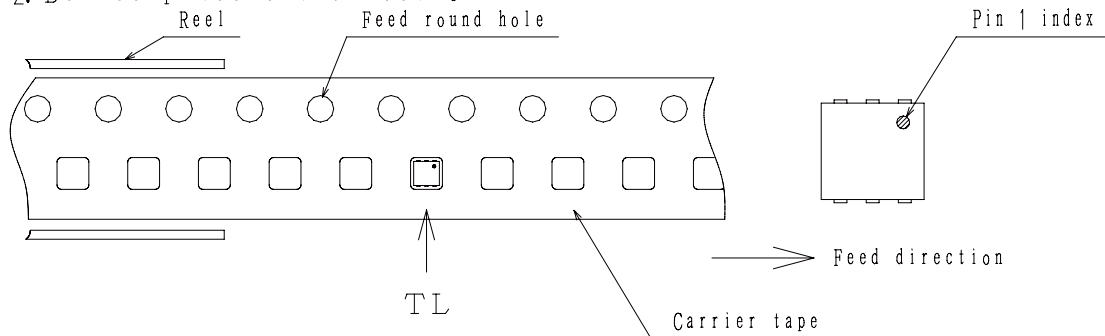
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

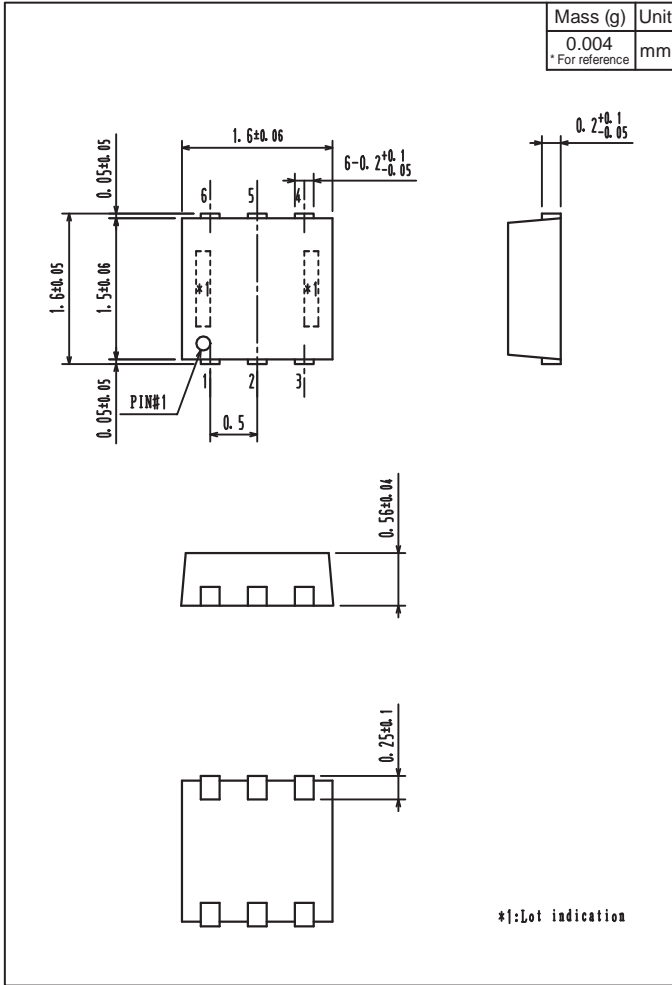


Those with pin 1 index on the feed hole side.....TL

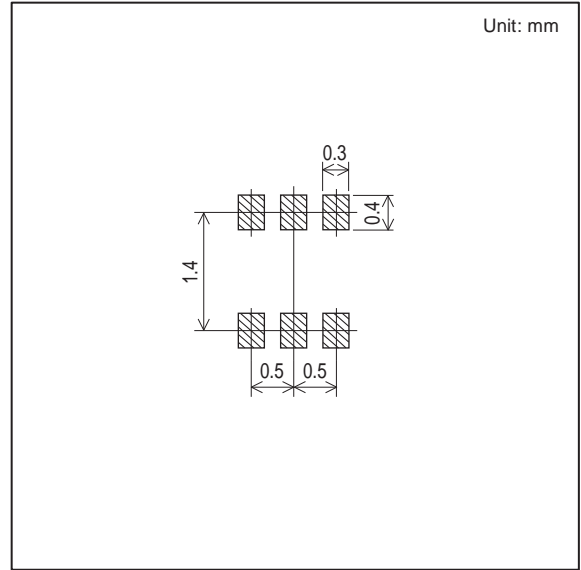
SMA4306

Outline Drawing

SMA4306-TL-H



Land Pattern Example



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