# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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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**

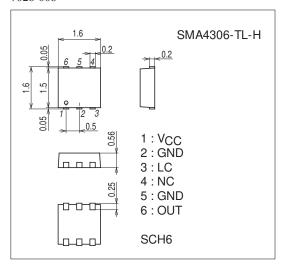
#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Supply Voltage	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

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

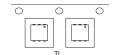
: SCH6

- JEITA, JEDEC
- Minimum Packing Quantity : 5,000 pcs./reel

#### Packing Type : TL



: SOT-563





#### Recommended Operating Conditions at Ta=25°C

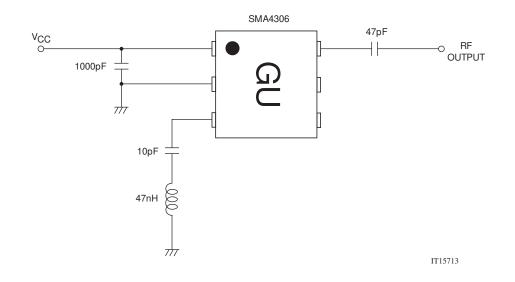
Parameter	Symbol	Conditions		Unit		
Parameter		Conditions	min	typ	max	Unit
Supply Voltage	VCC		3	5	5.5	V

#### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions		Unit		
Faranteler	Symbol	Conditions	min	typ	max	Unit
Circuit Current	ICC		29	34	39	mA
Oscillating Power	Posc	V <sub>CC</sub> =5V, R <sub>L</sub> =50Ω, fosc=400MHz	4.5	6.4	8.5	dBm
Torerance of Oscillating Frequency	fmod	V <sub>CC</sub> =5V, RL=50Ω, Specified Test Circuit (L=47nH, C=10pF)	-10		10	%

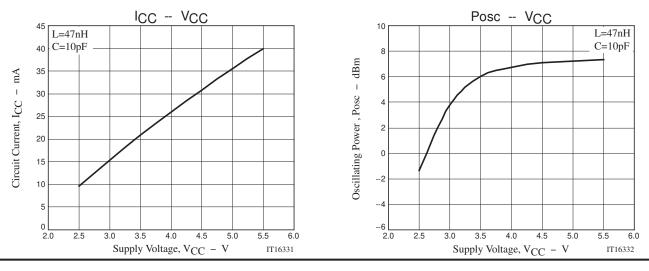
Note 1 : Oscillation frequency mainly depends on the external LC (The LC is attached additionally to the LC terminal in series). Note 2 : Recommended oscillation frequency 350MHz to 450MHz.

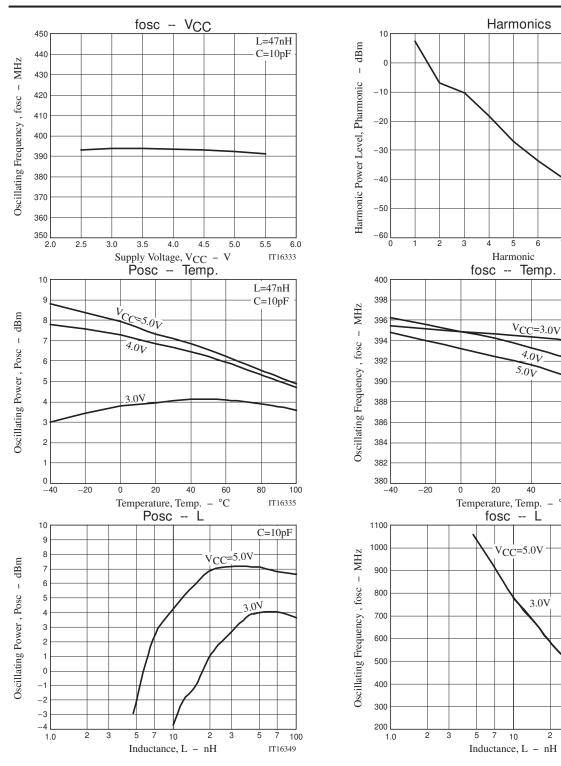
### **Test Circuit**



#### **Ordering Information**

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





V<sub>CC</sub>=5.0V L=47nH

C=10pF

8 9 10

IT16334

L=47nH C=10pF

80

60

°C

3

5

7 100

IT16350

100

IT16336

C=10pF

### Taping Specification SMA4306-TL-H

1. Packing Format

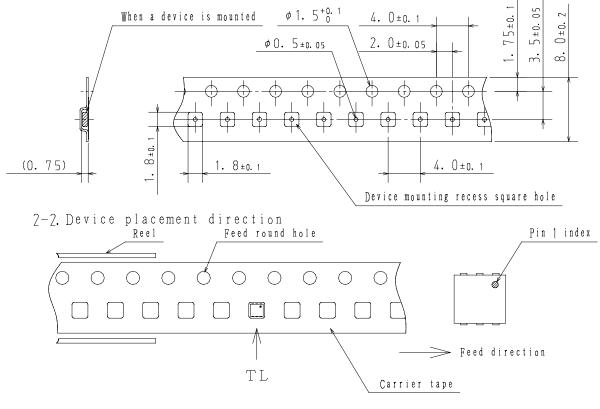
Package Name	Carrier Tape	Maximum Number of devices contained (pcs)			Packing format			
	Туре	Reel	Inner box	Outer box	Ini	ner BOX	(C-1)	Outer BOX (A-7)
SCH6	SCH6	5,000	25,000	150,000	5 ree	ls contain	e d	6 inner boxes contained
					Dime	nsions:mm	(external)	Dimensions:mm (external)
					18	3×72>	< 1 8 5	440×195×210
			Reel	label, [	nner	box label		<u>r box label</u>
Packing met	h o d			(u 1	nit:n	ım)	The for	a label at the time of factory shipments m of a label may change in physical pution process.
°	2		<	6	59	>	<	108
	Type LOT Quan Orig Reel la	No. tity	-> (1' -> (2' (Z) (Z) (Z) (Z) (Z) (Z) (Z) (Z) (Z) (Z)	11 11111111111111111111111111111111111	1000 (1) 1000 (	lillillillilli LD FREE € C* C* descriptio terminal	n shows t	TYPE CODE
				Label LEAD FRE			Phase Phase 3A	

LEAD FREE 4

JEITA Phase 3

2. Taping configuration

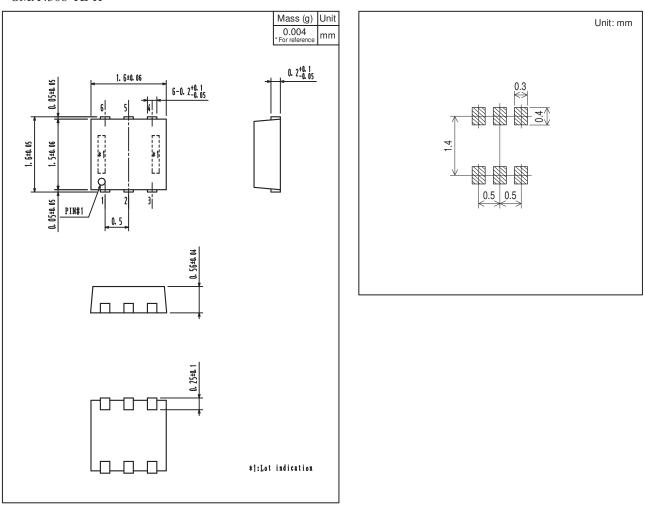
2-1. Carrier tape size (unit:mm)



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

Land Pattern Example

## Outline Drawing SMA4306-TL-H



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