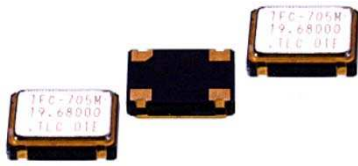


# Simple Packaged Crystal Oscillator (SPXO)

Wide Band Freq.  
Economic type  
Ceramic Package

Pb-free : RoHs compliance



## SP-5032CT1/2/3/5,

### ■ Typical applications

- PC board, VGA card, DVD, DVC, DSC, Printer Scanner.

### ■ Features

- 0.5 to 156.250 MHz.
- TTL-CMOS
- Miniature type essential in the high density PCB.
- Package : Metal lid + Ceramic package.
- 5.0×3.2×1.0mm

## ■ Specifications

Model	SP-5032CT1/2/3	SP-5032CT5
Available Frequency Range	0.500 to 156.250 MHz	0.50 to 110.000 MHz
Frequency Stability	±25 ppm(0 to +70° C) , ±50 ppm,±100 ppm(-40 to +85° C)	
Operating Temperature	-20 to +70° C , -40 to +85° C	
Storage Temperature	-55 to +100° C	
Power Supply Voltage	1.8 V , 2.5V , 2.8V , 3.0V , 3.3V±5%	5.0V±5%
Power Supply Current Consumption	10mA max: ~14.9MHz 15mA max: ~29.9MHz 20mA max: ~39.9MHz 25mA max: ~49.9MHz	30mA max: ~59.9MHz [ at 3.3V] 40mA max: ~79.9MHz 50mA max: ~99.9MHz 60mA max: ~125 MHz
Output	TTL-CMOS ( See Table A )	
Tri state Function	#1 : N.C. or "H"→Output enable / #1 : "L"→Hi-Z(Output disable)	

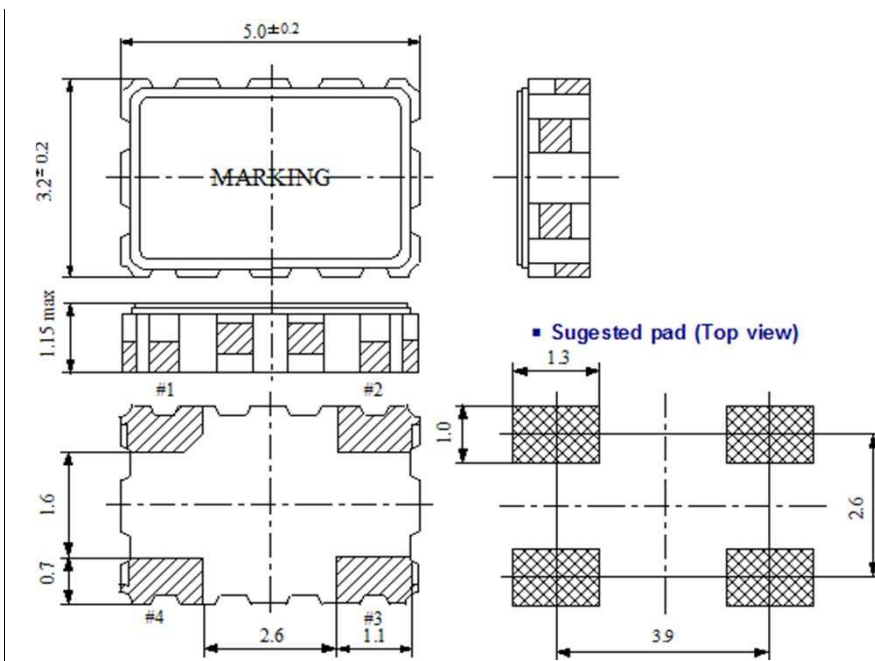
Table A

Output	Level Load	C-MOS	TTL ( 5.0V only )
		15 pF (30pF max.)	2TTL or 5TTL or 10TTL
	Output Voltage	Vol:0.1V <sub>dd</sub> max.,Voh:0.9V <sub>dd</sub> min.	Vol:0.4V max.,Voh:2.4V min.
	Rise & Fall Time	10ns max. : F ≤ 40MHz, 7ns max : F > 40MHz	
	Duty Cycle	40 to 60% at 50% V <sub>dd</sub> 40 to 60% at +1.4V	

## ■ Environmental Characteristics

Description	Specification
Fall Shock	Test : 3 time free drop onto concrete board from 150cm high Result: ±5.0 ppm max.
Vibration Shock	Test : Freq. 5-500Hz, Amplitude 1.5mm, Test time 4cycles/XYZ axis Result: ±5.0 ppm max.
Solderability	Test : Immersed into solder bath at 235±° C for 3 sec. Result: More than 95%
Humidity	Test : 90 to 95%RH at 60±3° C±500 hours Result: ±5.0 ppm max.
Reflow Heat	Test : 2 times of IR reflow soldering in accordance with reflow temperature profile as per the document No.:TR-0531 Result: ±5.0 ppm max.

## ■ Outline Drawing & Suggested Pad



TERMINAL	CONNECTION
#1	0E/CE
#2	GND
#3	OUTPUT
#4	V <sub>dd</sub>