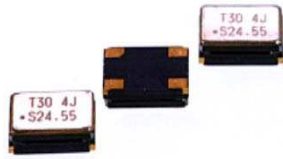


# Simple Packaged Crystal Oscillator (SPXO)

Ultra Miniature  
Low Current  
Ceramic Package

Pb-free : RoHs compliance



## SP-2520CR3

### Typical applications

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

### Features

- 1.0 to 200 MHz.
- C-MOS out / 15pF(50pF) Load.
- Data writing in EEPROM.
- Package : Metal lid + Ceramic package.
- 2.5×2.0×1.1mm

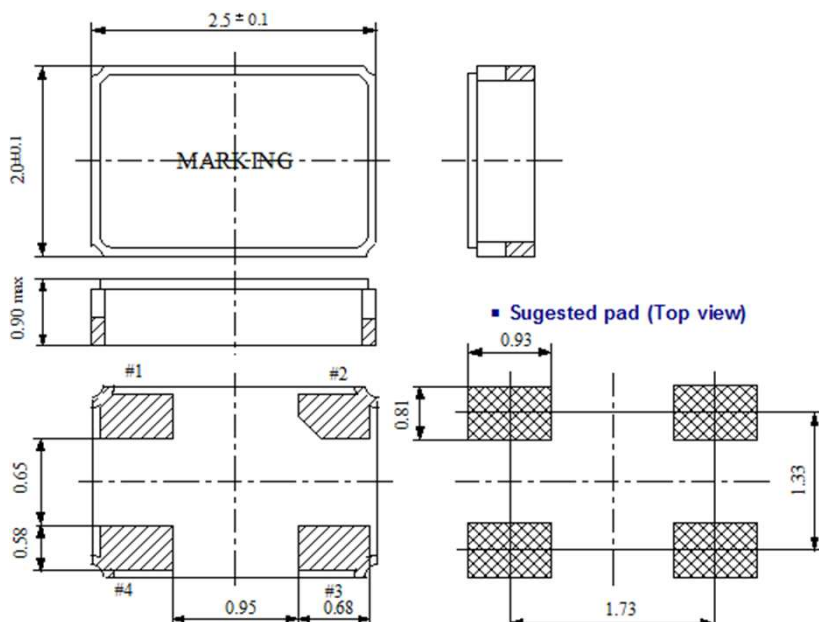
### Specifications

Model		SP-2520CR3	
Available Frequency Range		1.000 to 200.000 MHz	1.000 to 80.000 MHz
Frequency Stability		±50 ppm(-20 to +75° C) , ±100 ppm(-40 to +85° C)	
Operating Temperature		-40 to +85° C	
Storage Temperature		-55 to +100° C	
Power Supply Voltage		3.0 V±5% , 3.3V±5%	
Power Supply Current Consumption		30 mA max.	20 mA max.
		C-MOS	
		15 pF max.	50 pF max.
Output	Level	Vol : 0.1Vdd max. , Voh : 0.9Vdd min.	
	Load	1.0 to 80MHz:45 to 55% 1/2Vdd	45 to 55% at 1/2Vdd
	Output Voltage	80 to 200MHz:40 to 60% 1/2Vdd	
	Rise & Fall Time	100ps, 200ps, 250ps max.	
	Duty Cycle	10 ms	
Tri state Function		#1 : N.C. or "H"→Output enable / #1 : "L"→Hi-Z(Output disable)	

### 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: ±1.0 ppm max.

### Outline Drawing & Suggested Pad



TERMINAL	CONNECTION
#1	0E/CE
#2	GND
#3	OUTPUT
#4	Vdd