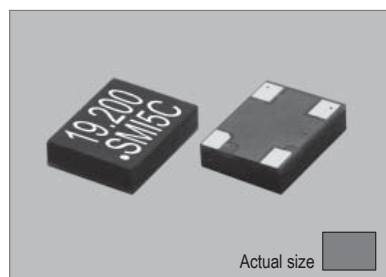
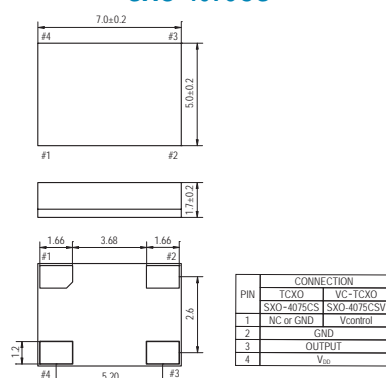


### SXO-4075CS

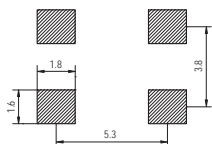


Actual size  
0.13 gm (wt.)

### SXO-4075CS



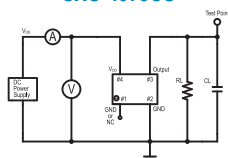
### SOLDERING PATTERN



### OUTPUT WAVEFORM

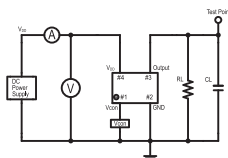


### TEST CIRCUIT SXO-4075CS



Both DC-Cut capacitor and by-pass capacitor are built in the oscillator.  
RL: 10Kohm ± 10%  
CL: 10pF ± 10% including fixture and probe capacitance

### SXO-4075CSV



Both DC-Cut capacitor and by-pass capacitor are built in the oscillator.  
RL: 10Kohm ± 10%  
CL: 10pF ± 10% including fixture and probe capacitance

## STANDARD SPECIFICATIONS

● CLIPPED SINE WAVEFORM  
● PACKAGE SIZE 7.0x5.0 mm

Item		Specifications						
General part number		SXO-4075CS*1	SXO-4075CSV*1					
Frequency range		10.000 MHz to 40.000 MHz						
Initial frequency tolerance at +25°C ± 2°C		±1.5 ppm max.*2	±1.5 ppm max.*2*3					
TCXO or VC-TCXO		TCXO	VC-TCXO					
Frequency Stability	Temperature range	DD/kjj : ±2 ppm max. over -30°C to +75°C (referred to +25°C) <sup>3</sup> CC/klj : ±1.5 ppm max. over -30°C to +85°C (referred to +25°C) <sup>3</sup> BB/klj : ±1 ppm max. over -30°C to +85°C (referred to +25°C) <sup>3</sup> AA/klj : ±0.5 ppm max. over -30°C to +85°C (referred to +25°C) <sup>3</sup>						
	Input voltage change	±0.2 ppm max. at VDD ±5% DC						
	Output load change	±0.2 ppm max. at 10 kΩ ±10% with 10 pF ±10%						
	Aging	±1 ppm max. per year at +25°C ±3°C						
Operating Conditions	Operating temperature	-30°C to +75°C (S1 = Standard 1) -30°C to +85°C (S2 = Standard 2) -40°C to +85°C (W = Option, frequency dependent)						
	Supply voltage (VDD)	D = +1.8V, F = +2.5V, H = +2.8V, J = +3.0V, K = +3.3V DC ±5%						
	Control voltage (Pin#1)	n.a.	0.9V ± 0.8V (VDD = +1.8V) 1/2 VDD ±1V (VDD = +2.5V to +3.3V)					
Absolute Max. Ratings	Supply voltage	-0.6V to +4.6V DC						
	Vcontrol voltage (Vcon)	n.a.	-0.6V to VDD +0.6V DC					
	Storage temperature	-40°C to +85°C						
Input current		1.5 mA max. (10.000 MHz to 30.000 MHz) 1.7 mA max. (30.000 MHz to 40.000 MHz)						
Output (-40°C to +85°C)	Level	0.8 Vp-p min.						
	Load	10 kΩ // 10 pF						
	Waveform	Clipped sine wave (DC-cut)						
Frequency Adjustment	Voltage control	n.a.	±8 ppm to ±13 ppm (VDD = +1.8V) ±9 ppm to ±15 ppm (VDD = +2.5V to +3.3V)					
		n.a.	Positive					
Frequency slope		n.a.	Positive					
Harmonic distortion		-5 dBc max.						
Start-up time		10 ms max.						
SSB phase noise (26.000 MHz)		-133 dBc / Hz, Typical at 1 kHz offset						
Short-term frequency stability		±1 ppb max. (Allan variance Tau = 0.1 sec.)						
IR reflow resistance		±1 ppm max. (referred to frequency before reflow)						
Reflow condition		+240°C ±10°C for 10 seconds +170°C ±10°C for 1 to 2 minutes (preheating)						
Standard frequencies (MHz)		10.000, 13.000, 16.367667, 16.369, 16.800, 19.200, 20.000, 23.104 24.5536, 25.000, 26.000, 38.400						
Optional Operating Temperature*4	Low limit / Symbol	-10°C / g	-15°C / h	-20°C / i	-25°C / j	-30°C / k	-35°C / l	-40°C / m
	High limit / Symbol	+55°C / ff	+60°C / gg	+65°C / hh	+70°C / ii	+75°C / jj	+80°C / kk	+85°C / ll

(\*1) Final part number to be assigned with package type, TCXO or VC-TCXO, frequency stability, input voltage, operating temperature and frequency.  
e.g. SXO-4075CSV-CC/klj-K-S2-19.2MHz  
(\*2) Referred to nominal frequency before reflow soldering.  
(\*3) At Vcon = 1/2 VDD DC for SXO-4075CSV.  
(\*4) Select "low limit" and "high limit" for new operating temperature combination from the lists.

## PACKAGE DATA

Item	Package	SXO-4075CS
Cover		Epoxy Resin
Base		Glass Epoxy
Sealing		Seam (Built-in crystal)
Terminal		Copper (metalized)
Terminal plating		Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)

## TAPE SPECIFICATIONS

