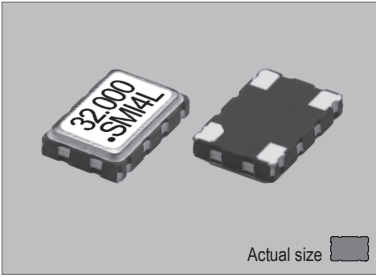
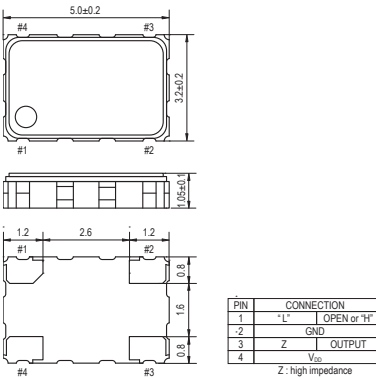


SXO-5032

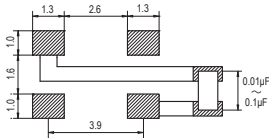


Actual size
0.052 gm (wt.)

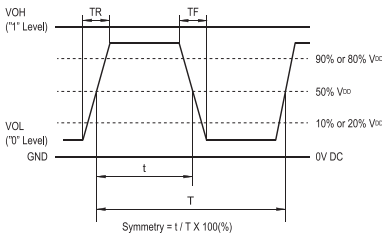
SXO-5032



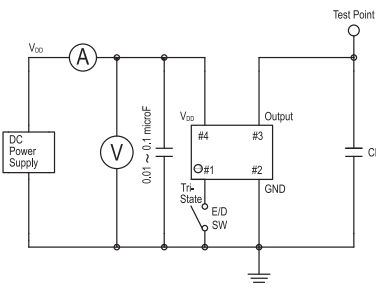
SOLDERING PATTERN



OUTPUT WAVEFORM



TEST CIRCUIT



CL: including fixture and probe capacitance.

STANDARD SPECIFICATIONS

- CMOS OUTPUT
- HIGH STABILITY TCXO
- PACKAGE SIZE 5.0x3.2 mm

Item	Specifications						
General part number	SXO-5032*1						
Frequency range	4.000 MHz to 54.000 MHz						
Frequency Stability	Frequency tolerance at +25°C ±2°C	±1 ppm max. (1 hour after reflow soldering)					
	Temperature range	±2.5 ppm max. over -30°C to +75°C (referred to +25°C)*2					
	Input voltage change	±0.2 ppm max. at V _{DD} ±5% DC					
	Output load change	±0.2 ppm max. at 15 pF ±10%					
	Aging	±1 ppm max. per year at +25°C ±3°C					
Operating Conditions	Operating temperature	-30°C to +75°C (Standard) -40°C to +85°C (W = Option, frequency dependent)					
	Supply voltage (V _{DD})	D = +1.8V*2, F = +2.5V, H = +2.8V, K = +3.3V DC ±5%					
Absolute Max. Ratings	Stand-by control voltage(Pin#1)	V _{IH} : 80% V _{DD} min. V _{IL} : 20% V _{DD} max.*2					
	Supply voltage	-0.5V to +4V DC					
Input current (max. mA)	Storage temperature	-55°C to +100°C					
	4 to 10 MHz	10 to 20 MHz	20 to 30 MHz	30 to 40 MHz	40 to 54 MHz		
		+1.8V*2	3.1	3.7	4.2	4.6	5.5
		+2.5V	3.1	3.7	4.2	4.6	5.5
		+2.8V	3.4	4.1	4.7	5.2	6.0
		+3.3 V	4.0	4.8	5.5	6.0	7.0
		Stand-by current*3	10 µA max. (Pin#1 = V _{IL})				
Output (-40°C to +85°C)	Symmetry	40% to 60% at 50% V _{DD} level					
	Rise and fall times	5 ns max. (10% V _{DD} to 90% V _{DD} level)					
	"0" level	V _{OL} : 10% V _{DD} max.					
	"1" level	V _{OH} : 90% V _{DD} min.					
Load	15 pF max. (CMOS)						
Disable delay time	200 ns max.						
Enable delay time	10 ms max.						
Start-up time	10 ms max.						
SSB phase noise	-145 dBc / Hz, Typical at 10 kHz offset						
Reflow condition	+250°C ±10°C for 10 seconds +170°C ±10°C for 1 to 2 minutes (preheating)						
Standard frequencies (MHz)	24.000, 25.000, 26.000, 27.000, 32.000, 40.000, 44.000, 50.000, 52.000						

(*1) Final part number to be assigned with package type, input voltage, operating temperature and frequency.
e.g. SXO-5032-H-S-32MHz
(*2) V_{DD} = +1.8V is available for only all over ±5 ppm max. of frequency stability.
(*3) Internal crystal oscillation to be halted (Pin#1 = V_{IL})

PACKAGE DATA

Item	Package	SXO-5032
Lid		Metal
Base		Ceramic
Sealing		Seam
Terminal		Tungsten (metalized)
Terminal plating		Gold / Nickel (surface) / (under)
RoHS		Compliant (Pb-free)

TAPE SPECIFICATIONS

