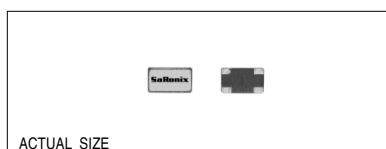


Technical Data

S1623 Series



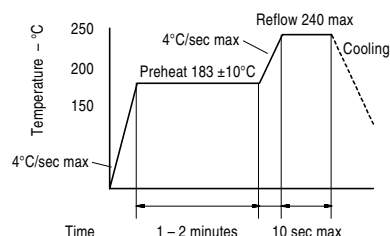
Description

The 3.3V S1623 Series are crystal-controlled, low-current oscillators providing precise rise and fall times to drive high performance applications. The sub-miniature 3.5 x 6 x 1.5mm, low profile leadless ceramic package has gold-plated contact pads ideal for today's pick-and-place SMT environments. Available to 50 MHz, the parts can be ordered with ± 25 , ± 50 or ± 100 ppm frequency stability.

Applications & Features

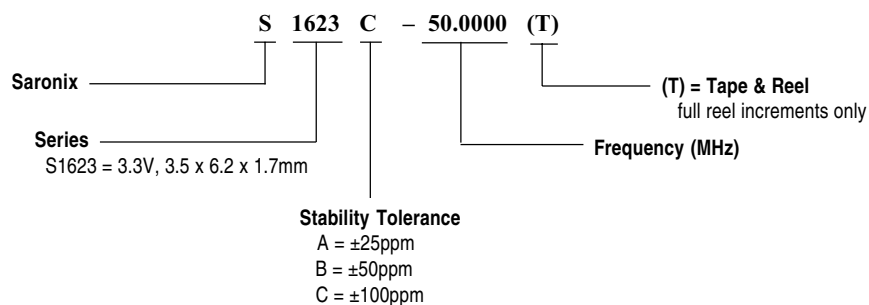
- Sub-miniature, 1.7mm high ceramic package ideal for SMT applications
- 3.3V operation
- Tri-State
- CMOS & HCMOS compatible
- Perfect for PCs; Notebook, Palmtop Computers; Portable Applications; PCMCIA Cards.
- Anywhere small size, low power, surface mountability are a priority.
- Available on tape & reel; 16mm tape, 1000pcs per reel

Solder Reflow Guide



Frequency Range:	1.5 MHz to 50 MHz
Frequency Stability:	± 25 , ± 50 or ± 100 ppm over all conditions; calibration tolerance, operating temperature, input voltage change, load change, aging (1 year @ 25°C average ambient operating temperature), shock and vibration.
Temperature Range:	
Operating:	0 to +70°C
Storage:	-55 to +125°C
Supply Voltage:	3.3V $\pm 10\%$
Supply Current:	15mA max 1.5 to 25 MHz 25mA max 25+ to 50 MHz
Output:	
Symmetry:	40/60% max @ 50% VDD, tighter symmetry available, call SaRonix
Rise & Fall Times:	10ns max 20% to 80% VDD
Logic 0:	10% VDD max
Logic 1:	90% VDD min
Load:	30pF max
Period Jitter RMS:	8ps max
Mechanical:	
Shock:	MIL-STD-883, Method 2002, Condition B
Solderability:	MIL-STD-883, Method 2003
Vibration:	MIL-STD-883, Method 2007, Condition A
Solvent Resistance:	MIL-STD-202, Method 215
Terminal Strength:	MIL-STD-202, Method 211, Conditions A & C
Resistance to Soldering Heat:	MIL-STD-202, Method 210, Condition I or J
Environmental:	
Gross Leak Test:	MIL-STD-883, Method 1014, Condition C
Fine Leak Test:	MIL-STD-883, Method 1014, Condition A2
Thermal Shock:	MIL-STD-883, Method 1011, Condition A
Moisture Resistance:	MIL-STD-883, Method 1004

Part Numbering Guide



Technical Data

S1623 Series

Package Details

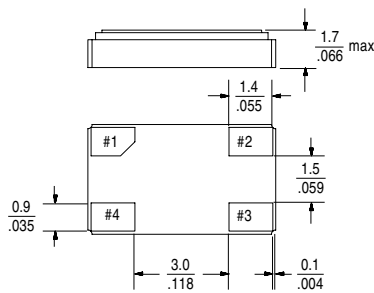
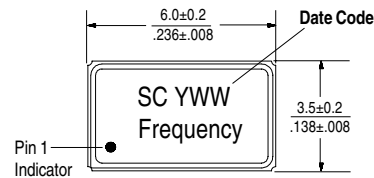
Marking Format (exact location of items may vary)

S = SaRonix

A, B, C = Stability Tol. (see Part Numbering Guide)

Y = year: 1 = 2001, 2 = 2002, 3 = 2003 etc.

WW = week



Pin Configurations

#1 = OE #2 = GND
#4 = V_{DD} #3 = OUTPUT

Tri-State Logic Table

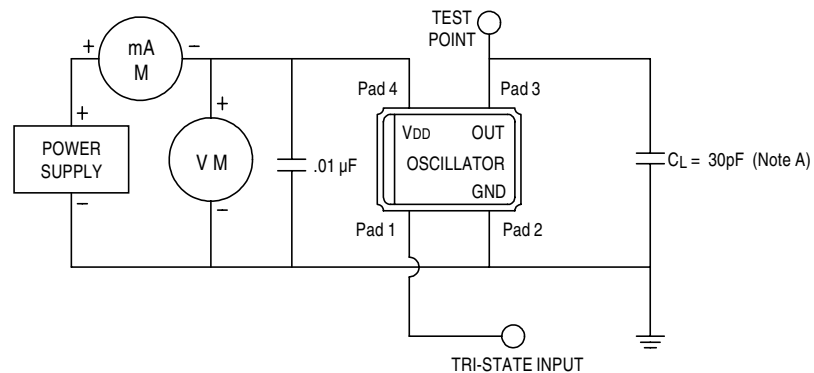
Pad # 1 Input	Pad # 3 Output
Logic 1 or NC	Oscillation
Logic 0 or GND	High Impedance

Required Input Level on pad #1:

Logic 1 = 2.2V min

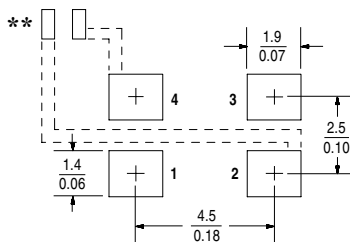
Logic 0 = 0.8V max

Test Circuits



Note A: C_L includes probe and jig capacitance.

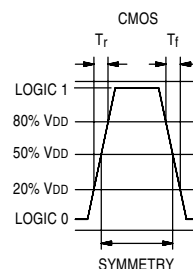
Recommended Land Pattern



** External high frequency power supply decoupling required.

Scale: None (Dimensions in $\frac{\text{mm}}{\text{inches}}$)

Output Waveform



All specifications are subject to change without notice.

DS-198 REV IR