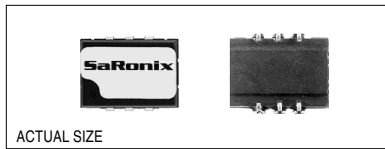


Technical Data

S1228 Series



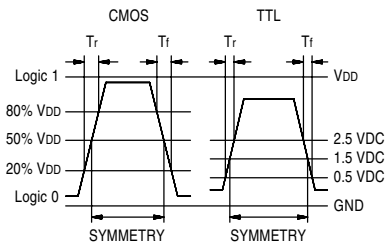
Description

A crystal controlled oscillator, with output logic levels compatible with ACMOS and TTL logic families. The device is moulded in a plastic, 6-pin, SMD, J leaded package that is ideal for today's automated assembly environments.

Applications

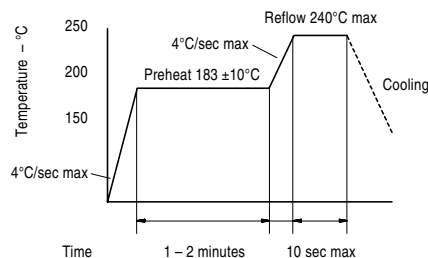
- Compact, plastic-moulded surface mountable package
- ACMOS and TTL compatible
- Tri-State output
- Ideally suited for use with contemporary MPU's and custom ASIC's

Output Waveform



Frequency Range:	32 MHz to 125 MHz
Frequency Stability:	See Part Numbering Guide: $\pm 50\text{ppm}$ to $\pm 130\text{ppm}$ over all conditions: calibration tolerance, operating temperature, input voltage, load, shock and vibration.
Aging @ 25°C:	$\pm 10\text{ppm}$ max
Temperature Range:	Operating: 0 to +70°C, 0 to +85°C, -40 to +85°C, See Part Numbering Guide Storage: -55 to +125°C
Supply Voltage:	Recommended Operating: 5V $\pm 10\%$
Supply Current:	35mA max, 32 to 70 MHz 50mA max, 70+ to 125 MHz
Output:	Symmetry: See Part Numbering Guide and Output Waveform Rise & Fall Times: 1.5ns max measured 0.5 to 2.5V Logic 0: 10% V_{DD} max Logic 1: 80% V_{DD} min Load: 5 MTTL, 32 to 70 MHz 50 Ω AC, 70+ to 125 MHz Period Jitter RMS: 13ps max 32 to 72 MHz 20ps max 72+ to 125 MHz, 0 to +70°C 25ps max, 72+ to 125 MHz, -40 to +85°C
Mechanical:	Shock: MIL-STD-883, Method 2002, Condition B Solderability: MIL-STD-883, Method 2003 Terminal Strength: MIL-STD-202, Method 211, Conditions A & C Vibration: MIL-STD-883, Method 2007, Condition A Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition I or J
Environmental:	Thermal Shock: MIL-STD-883, Method 1011, Condition A Moisture Resistance: MIL-STD-883, Method 1004

Solder Reflow Guide



Technical Data

S1228 Series

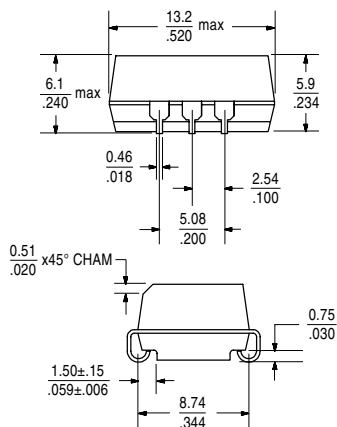
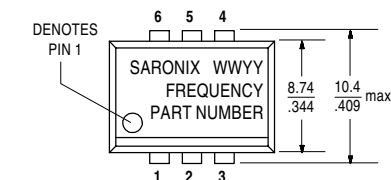
Tri-State Logic Table

Pin 2 Input	Pin 4 Output
Logic 1 or NC	Oscillation
Logic 0 or GND	High Impedance

Required Input Levels on Pin 2:

- Logic 1 = 3.0V min
- Logic 0 = 0.5V max

Package Details & Marking*



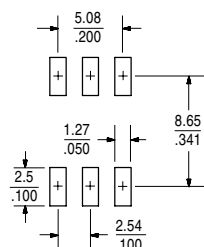
Pin Functions:

- Pin 1: N/C
- Pin 2: Tri-State
- Pin 3: GND
- Pin 4: Output
- Pin 5: N/C
- Pin 6: VCC

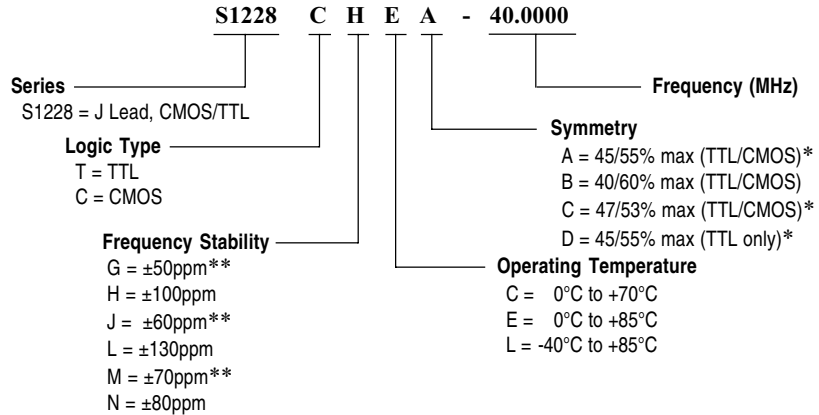
Scale: None (Dimensions in mm/inches)

* Exact location of items may vary

Recommended Land Pattern



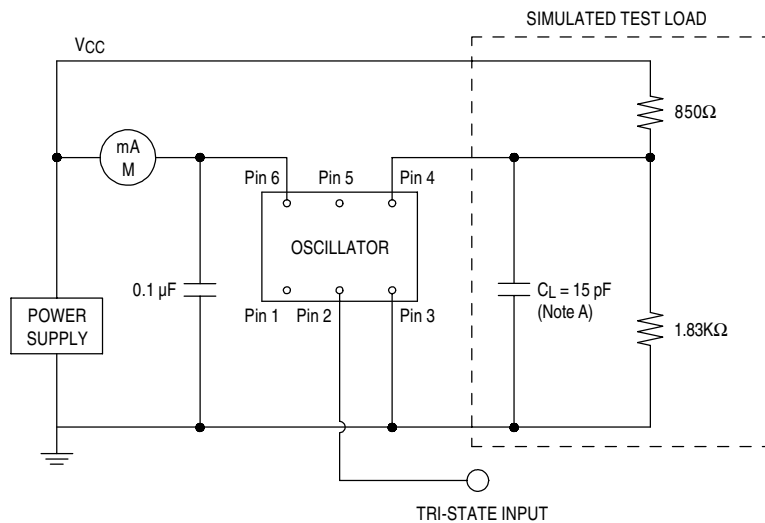
Part Numbering Guide



* not available with all frequencies, please contact SaRonix

** 0°C to +70°C or 0°C to +85°C only

Test Circuit



NOTE A: C_L includes probe and jig capacitance.

All specifications are subject to change without notice.