

Technical Data

S1150 Series



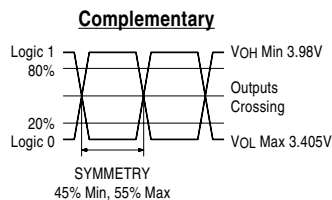
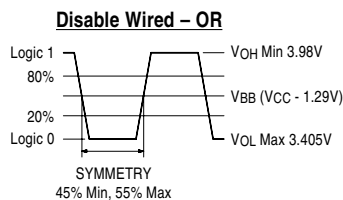
Description

A highly stable crystal controlled, high frequency oscillator, compatible with Motorola 10KH family. The output can be disabled and wired-OR for testing or combining multiple clocks. Open emitter output allows the user to select the load termination to optimize performance. Complementary outputs are available.*

Applications & Features

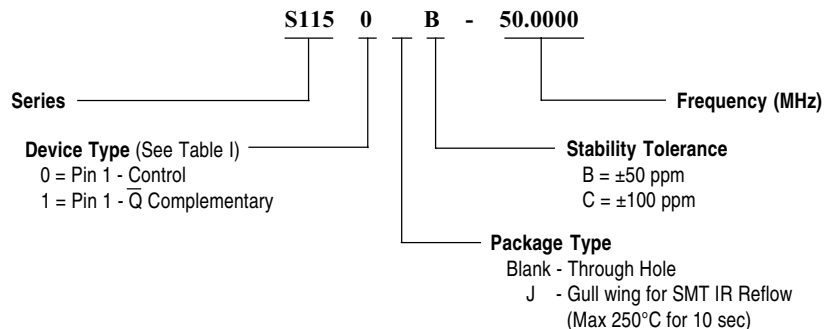
- Ideal for high resolution graphics & imaging applications, high performance microprocessors and work stations
- Provides 10KH compatible outputs
- Frequencies up to 130 MHz
- Disable/wired-OR output feature available
- Standard 0.200" high package

Output Waveform



Frequency Range:	20 MHz to 130 MHz
Frequency Stability:	±50 or ±100 ppm over all conditions: calibration tolerance, operating temperature, input voltage change, load change, aging, shock and vibration.
Temperature Range:	Operating: 0 to +70°C (-40 to +85°C available) Storage: -55 to +125°C
Supply Voltage:	+5.0V nominal (4.75 to 5.5)
Supply Current:	S1150: 37mA typ, 45mA max (31mA typ disabled) S1151: 52mA typ, 60mA max
Output Drive:	Symmetry: 45/55% @ VBB Rise & Fall Times: 1ns, typ, 3ns, max 20% - 80% Logic 0: VCC -1.60V max Logic 1: VCC -1.02V min Load: 50Ω to VCC -2V (all outputs require termination) Jitter: 3.5ps max RMS period jitter, 1ps max 1σ cycle-to-cycle jitter
Mechanical:	Shock: MIL-STD-883, Method 2002, Condition B Solderability: MIL-STD-883, Method 2003 Terminal Strength: MIL-STD-202, Method 211, Conditions A and C Vibration: MIL-STD-883, Method 2007, Condition A Solvent Resistance: MIL-STD-202, Method 215 Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition B
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

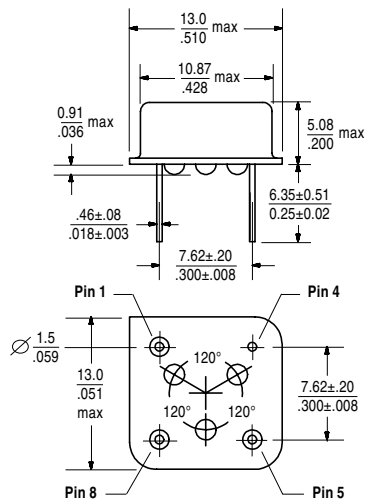


* For single output without disable contact factory.

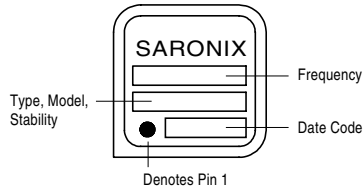
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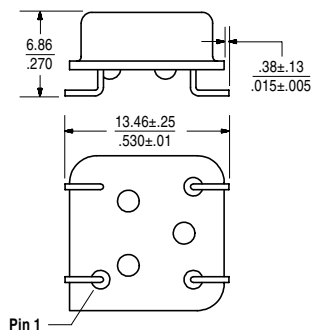
Package Details



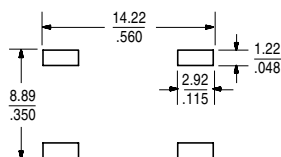
Standard Marking Format



Gull Wing Package



Recommended Land Pattern



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

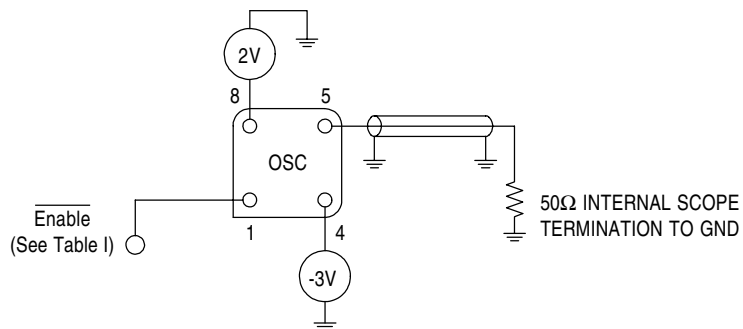
Enable Function Truth Table where applicable (Table I)

Pin 1	LOGIC 1	LOGIC 0 OR N/C
Pin 5	$\bar{Q}$ LOCKED LOW (WIRED-OR)	CLOCK OUTPUT ($\bar{Q}$)

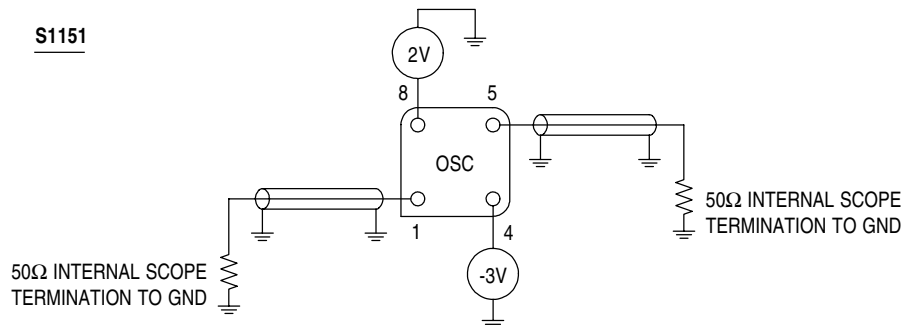
Enable/Disable Propagation Delay:
10KH: $((1/f)/2) + 2ns$ max

Test Circuits

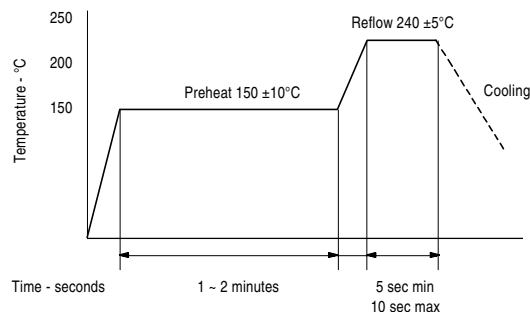
S1150



S1151



Solder Reflow Guide



All specifications are subject to change without notice.