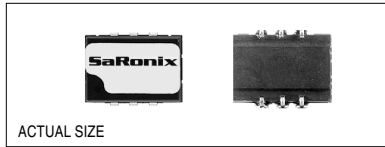


Technical Data

SEL3600 / 3700 Series



Description

A crystal controlled, high frequency, highly stable oscillator, compatible with 10K ECL Logic. The output can be disabled and wired-OR to facilitate testing or combining multiple clocks. Open emitter output allows the user to adjust termination to optimize matching and performance. Complementary outputs are standard.*

Applications & Features

- Ideal for high resolution graphics & imaging applications
- Provides 10K compatible outputs
- 3.3V PECL version available
- Frequencies from 25 MHz to 155.52 MHz, consult factory for frequencies beyond this range
- Disable/wired-OR output feature available
- Standard SMD 6-pin J-lead package
- Available on tape & reel; 24mm tape, 500pcs per reel

Frequency Range:	25 MHz to 155.52 MHz
Frequency Stability:	±50 or ±100 ppm over all conditions: calibration tolerance, operating temperature, input voltage, load, aging, shock and vibration.
Temperature Range:	Operating: 0 to +70°C Storage: -55 to +125°C
Supply Voltage:	+5.0V or -5.2V or +3.3V PECL
Supply Current:	70mA typ, 100mA max @ 5V, 63mA typ @ 3.3V
Output Drive:	Symmetry: 45/55% max V _{BB} or Complementary Outputs Crossing Rise & Fall Times: 350ps typ, 550ps max, 20% to 80% of the waveform Logic 0: V _{CC} -1.60V max @ 5V V _{CC} -1.62V max @ 3.3V Logic 1: V _{CC} -1.02V min @ 5V V _{CC} -1.025V min @ 3.3V Load: 50Ω to V _{CC} -2V (all outputs require termination) RMS Period Jitter: 3.5ps max, 1ps max 1σ cycle-to-cycle jitter

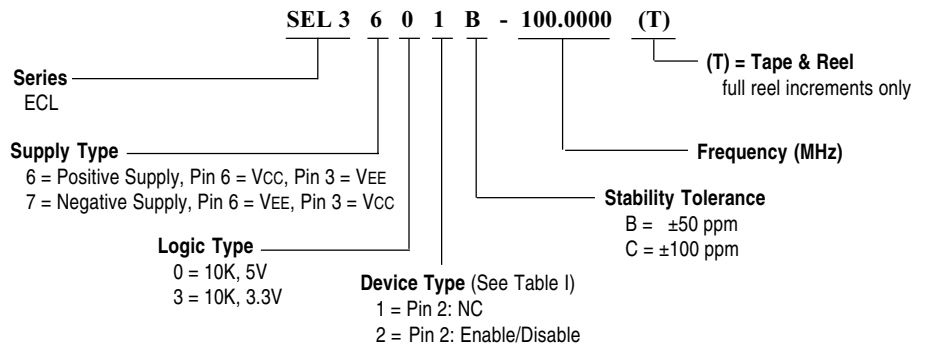
Mechanical:

Shock:	MIL-STD-883, Method 2002, Condition B
Solderability:	MIL-STD-883, Method 2003
Terminal Strength:	MIL-STD-883, Method 2004, Condition B2
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 I or J

Environmental:

Thermal Shock:	MIL-STD-883, Method 1011, Condition A
Moisture Resistance:	MIL-STD-883, Method 1004

Part Numbering Guide

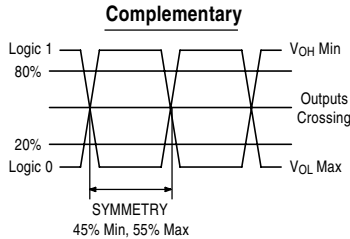


*For internal termination or single output without disable contact factory.

Technical Data

SEL3600 / 3700 Series

Output Waveform

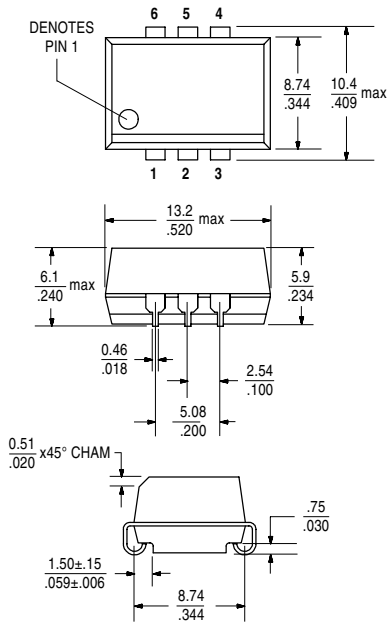


Enable Function Truth Table where applicable (Table I)

TRUTH TABLE				
Pin 2	Positive Supply		Negative Supply	
	Pin 4	Pin 1	Pin 4	Pin 1
Logic 0 or N/C	CLK Output	$\overline{\text{CLK}}$ Output	$\overline{\text{CLK}}$ Output	CLK Output
Logic 1	Logic 0	Logic 1	Logic 1	Logic 0

Enable/Disable Propagation Delay: $10K: (\lceil 1/f \rceil / 2) + 250\text{ps}$

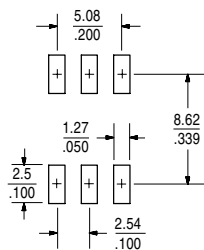
Package Details



Pin Functions:

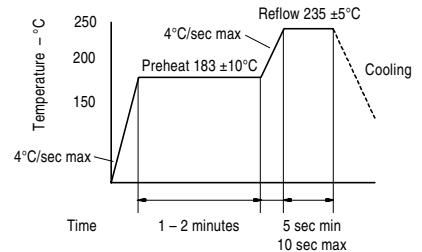
- Pin 1: Output
- Pin 2: Enable / Disable or N/C
- Pin 3: VEE or VCC
- Pin 4: Output
- Pin 5: N/C
- Pin 6: VCC or VEE

Recommended Land Pattern



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

Solder Reflow Guide

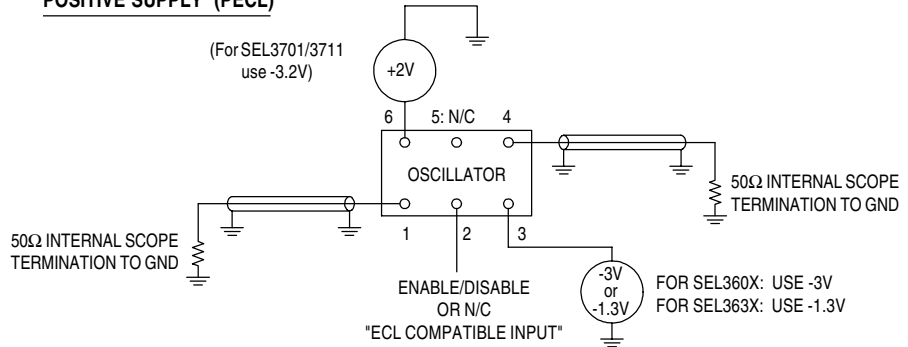


Supply Options (Table II)

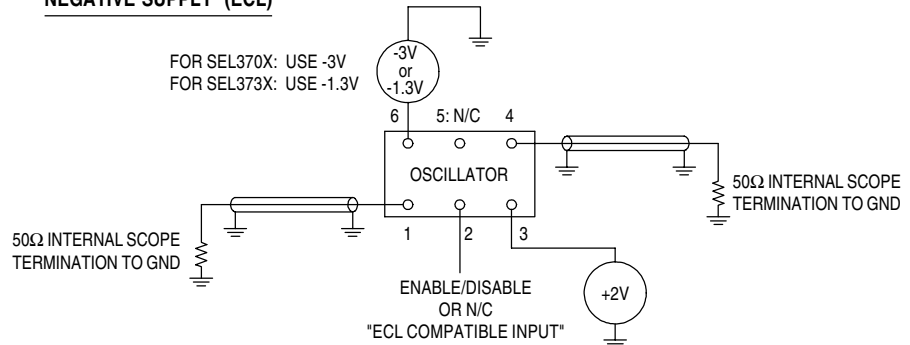
Device Type	Pin 3	Pin 6
SEL36XX	VEE 0V / GND	VCC +5V / +3.3V
SEL37XX	VCC 0V / GND	VEE -5V / -3.3V

Test Circuits

POSITIVE SUPPLY (PECL)



NEGATIVE SUPPLY (ECL)



All specifications are subject to change without notice.

DS-165 REV D01