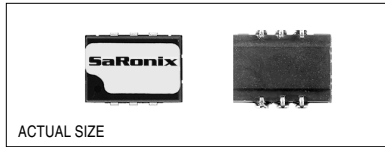


### Technical Data

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

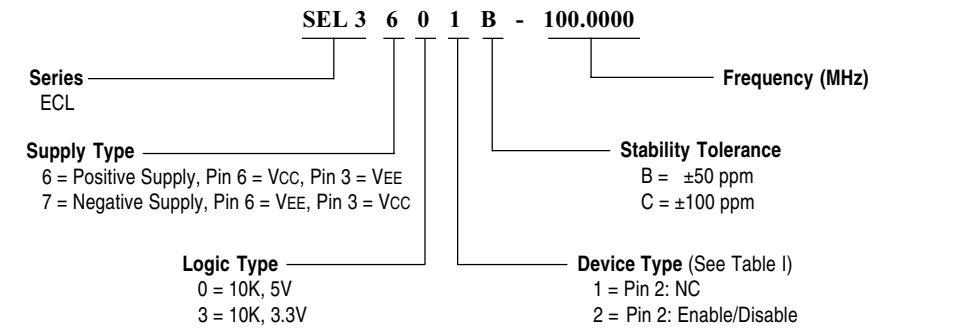
- Ideal for high resolution graphics & imaging applications
- Provides 10K compatible outputs
- 3.3V PECL version available
- Frequencies from 33 MHz to 155.52 MHz, consult factory for frequencies beyond this range
- Disable/wired-OR output feature available
- Standard SMD 6-pin J-lead package

<b>Frequency Range:</b>	33 MHz to 155.52 MHz
<b>Frequency Stability:</b>	±50 or ±100 ppm over all conditions: calibration tolerance, operating temperature, input voltage, load, aging, shock and vibration.
<b>Temperature Range:</b>	Operating: 0 to +70°C Storage: -55 to +125°C
<b>Supply Voltage:</b>	+5.0V or -5.2V or +3.3V PECL
<b>Supply Current:</b>	70mA typ, 100mA max @ 5V, 63mA typ @ 3.3V
<b>Output Drive:</b>	Symmetry: 45/55% max V <sub>BB</sub> or Complementary Outputs Crossing Rise & Fall Times: 350ps typ, 550ps max, 20% to 80% of the waveform Logic 0: V <sub>CC</sub> -1.60V max @ 5V V <sub>CC</sub> -1.62V max @ 3.3V Logic 1: V <sub>CC</sub> -1.02V min @ 5V V <sub>CC</sub> -1.025V min @ 3.3V Load: 50Ω to V <sub>CC</sub> -2V (all outputs require termination) Jitter: 3.5ps max RMS period jitter, 1ps max 1σ cycle-to-cycle jitter

<b>Mechanical:</b>	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
--------------------	--

<b>Environmental:</b>	Thermal Shock: MIL-STD-883, Method 1011, Condition A Moisture Resistance: MIL-STD-883, Method 1004
-----------------------	---

#### Part Numbering Guide

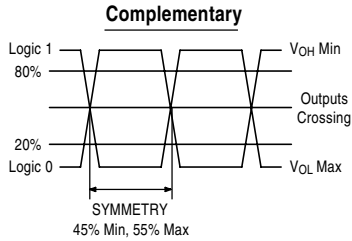


\*For internal termination or single output without disable contact factory.

### Technical Data

SEL3600 / 3700 Series

#### Output Waveform

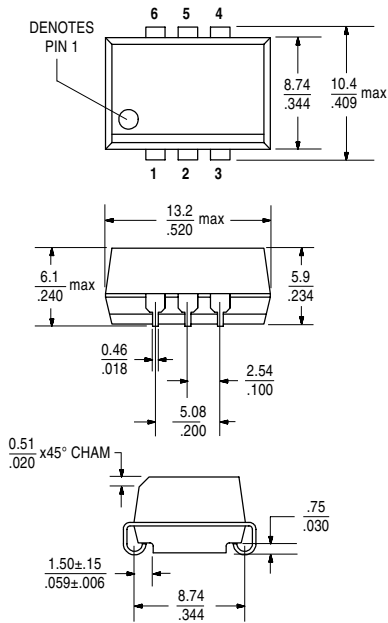


#### Enable Function Truth Table where applicable (Table I)

TRUTH TABLE				
$\overline{EN}$	Positive Supply		Negative Supply	
	Pin 4	Pin 1	Pin 4	Pin 1
Logic 0	CLK Output	$\overline{CLK}$ Output	$\overline{CLK}$ Output	CLK Output
Logic 1	Logic 0	Logic 1	Logic 1	Logic 0

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

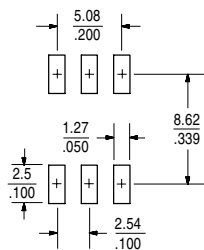
#### Package Details



#### Pin Functions:

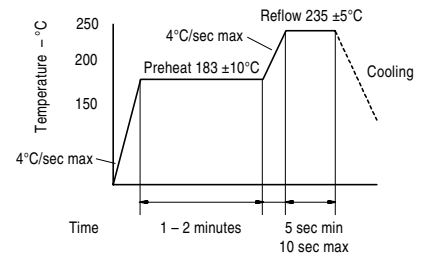
Pin 1: Output  
Pin 2: Enable / Disable or N/C  
Pin 3: VEE or VCC  
Pin 4: Output  
Pin 5: N/C  
Pin 6: VCC or VEE

#### Recommended Land Pattern



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

#### Solder Reflow Guide

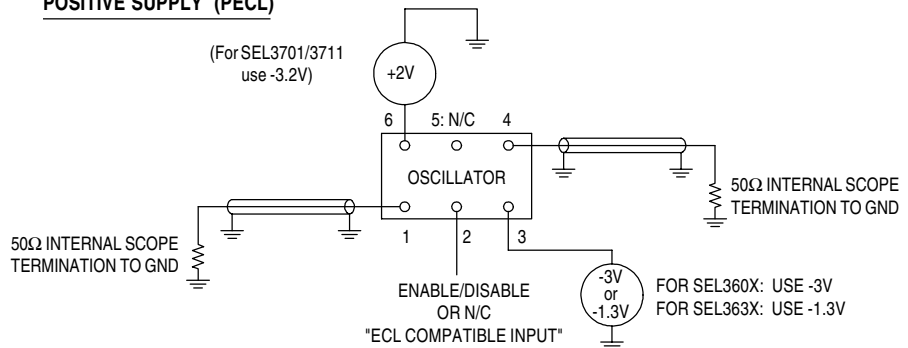


#### Supply Options (Table II)

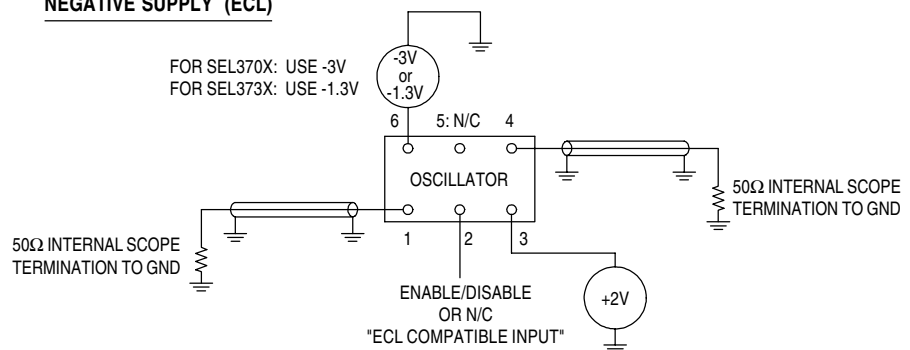
Device Type	Pin 3	Pin 6
SEL36XX	VEE 0V / GND	VCC +5V / +3.3V
SEL37XX	VCC 0V / GND	VEE -5V / -3.3V

#### Test Circuits

##### POSITIVE SUPPLY (PECL)



##### NEGATIVE SUPPLY (ECL)



All specifications are subject to change without notice.