



Crystal Clock Oscillator — ECL

by SaRonix

8003329 SARONIX

83D 00065 D

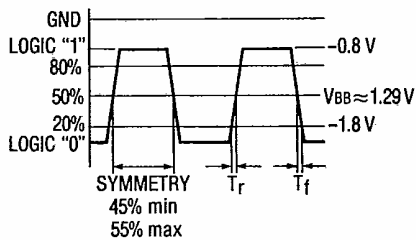
Technical Data

Ref. No.	Series M
Date	October 1986
Page	1 of 2

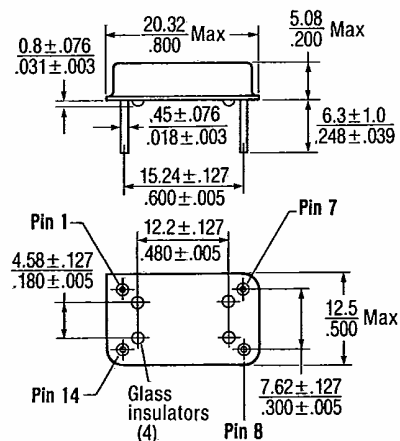
Description

A crystal controlled hybrid oscillator circuit providing precise rise and fall times to drive ECL logic devices. Unit is packaged in a 14-pin DIP compatible, resistance welded, all metal case. Internal termination allows direct interfacing to other ECL devices. Optional open emitter output allows the user to select the load termination to optimize performance. Complementary output is also available.

Output Waveform



Package



Standard Marking Format



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

Frequency Range:

10k:	5 MHz to 140 MHz
10kH:	50 MHz to 200 MHz

Frequency Stability:

$\pm 0.0025\%$ to $\pm 0.10\%$ over all conditions: calibration tolerance, operating temperature, input voltage change, load change, aging, shock and vibration.

Temperature Range:

Operating:	0°C to +70°C
Storage:	-55°C to +125°C

Input Voltage:

-5.2VDC $\pm 5\%$

Input Current:

60 mA max, 40 mA typical

Output:

Symmetry:	50% $\pm 5\%$ at V_{BB}
Rise & Fall Times:	(20% to 80%):
10k:	1.5 ns typical
10kH:	1.0 ns typical
Output Termination:	510 ohms to V_{EE} (Internal)
"0" Level:	-1.8V
"1" Level:	-0.8V

Mechanical:

Shock:	MIL-STD-883C, Method 2002.3, Condition B
Solderability:	MIL-STD-883C, Method 2003.3
Terminal Strength:	MIL-STD-202F, Method 211A, Conditions A and C
Vibration:	MIL-STD-883C, Method 2007.1, Condition A
Solvent Resistance:	MIL-STD-202F, Method 215B
Resistance to Soldering Heat:	MIL-STD-202F, Method 210A, Condition B

Environmental:

Gross Leak Test:	MIL-STD-883C, Method 1014.5, Condition C
Fine Leak Test:	MIL-STD-883C, Method 1014.5, Condition A2, $< 5 \times 10^{-8}$ ATM cc/sec
Thermal Shock:	MIL-STD-883C, Method 1011.4, Condition A
Moisture Resistance:	MIL-STD-883C, Method 1004.4