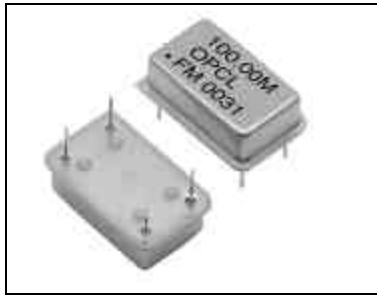


# FMOPCL FMOECL SERIES

+5.0, +3.3 or -5.2, Vdc  
PECL & ECL Clock Oscillators

**14 PIN DIP**



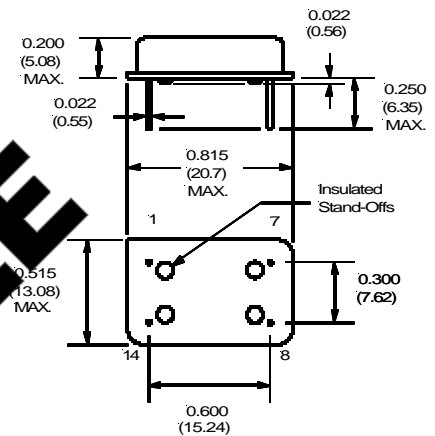
- ECL and PECL Voltage Options
- High Frequency Range
- Low Noise
- SMD Gull Wing Available

## SPECIFICATIONS

Parameter	PECL	Specification	ECL
Frequency Range		30.0 - 160.0 MHz	
Overall Frequency Tolerance		±20 ppm to ±100 ppm (Inclusive of Operating Temp., Supply Voltage and Load)	
Operating Temperature Range		0 to +70° C Std. (See Spec. Options)	
Storage Temperature		-55° to +125°	
Supply Voltage (Vdd)	+5.0 Vdc (±0.5 Vdc) +3.3 Vdc (±0.3 Vdc)		-5.2 Vdc (±0.5Vdc) (See Voltage Options)
Supply Current	70 mA max. (+5.0 Vdd) 60 mA max. (+3.3 Vdd)		70 mA max. (-5.2 Vdd)
Symmetry (Duty Cycle)		40/60% Std. (5/5% Avail. (See Spec. Options S))	
Logic Type		PECL / ECL, 100K Compatible	
Output Load*		330 ohms max. (Vdd = 5.0 Vdc), 50 ohms to -2 Vdc., refer Vdd	
Output "0" Level (VOL)	(Vdd - 1.60 V) max.		-1.60 V max.
Output "1" Level (VOH)	(Vdd - 0.4 V) min.		-1.02 V min.
Rise and Fall Time		2nS max.	
Pin 1 Options (See Spec Options N, C, T below and add option letter in part number)		Pin 1: No Connection (Std.) Pin 1: Complementary Output (C) Pin 1: Tri-State (T) Tri-State Enable Low Level, (Vdd - 1.6 V) Max. Tri-State Disable High Level, (Vdd - 0.4 V) Vdc Min. When oscillator is disabled, the output is in a low state (VOL).	
Aging @ 25° C		±10 ppm max. first year	

All specifications are to 0.5% without notice.

FULL SIZE 14 PIN DIP



PIN FUNCTION TABLE

Pin	Function
1	See Pin 1 Options
7	Vee (Case Ground)
8	Output
14	Vdd (Supply Voltage)

\*Other ECL and PECL Output Load and Pin Function configurations are available upon request.

NOTE : Waveforms & Test Circuits on pages 48, 49

Standard Specifications for product indicated in color

Dimensions:  $\frac{\text{Inches}}{(\text{mm})}$

## PART NUMBERING SYSTEM

MARKING: See Page 57, Format G

<b>Product Family</b> PCL - PECL Osc. ECL - ECL Osc. Full-Size 8 Pin Dip	<b>FMO PCL A 00 A S/N/C/T - XXXXXXXXM - CM</b>	<b>Temp. Range</b> A - 0 to 70 °C B - 20 to 70 °C C - 40 to 85 °C D - 10 to 50 °C E - 10 to 60 °C F - 30 to 60 °C J - 0 to 50 °C X - Custom	<b>Frequency (MHz)</b> S - Tight Symmetry (45/55%) Duty Cycle N - Pin 1 No Connect (Std.) C - Pin 1 Complimentary Output T - Pin 1 Tri-State	<b>Options</b> GW- Gull Wing PD - Parameter Data CM - Custom Mark BLANK - None Req'd.
<b>Input Voltage</b> A - PECL +5.0 Vdc (Vdd) B - PECL +3.3 Vdc (Vdd) E - ECL -5.2 (Vdd)	<b>Overall Freq. Tol.</b> 20 - ± 20 ppm 25 - ± 25 ppm 50 - ± 50 ppm 00 - ± 100 ppm nn - ± Custom Value	<b>Specification Options</b> S - Tight Symmetry (45/55%) Duty Cycle N - Pin 1 No Connect (Std.) C - Pin 1 Complimentary Output T - Pin 1 Tri-State		



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