

# SMD COMPLEMENTARY OUTPUT ECL OSCILLATOR

## F5500

The F5500 SMD ECL oscillator features the high frequency range of ECL in a more compact surface mount package. A choice of negative (F5500AC) or positive (F5500BC) supply voltages, both with complementary outputs are available.

### FEATURES

- High Frequency Range
- Negative or Positive Supply Voltages
- Complementary Outputs



**PRELIMINARY**

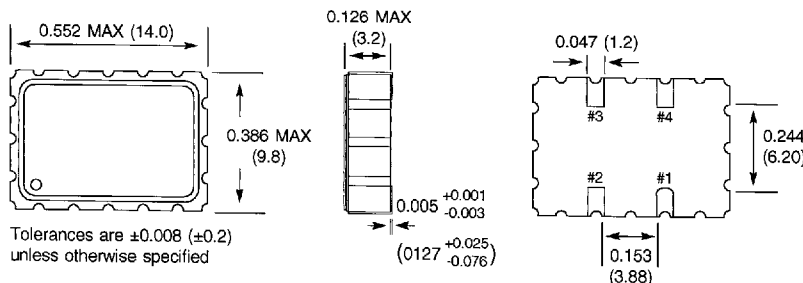
Actual Size

OSCILLATORS

### • ELECTRICAL CHARACTERISTICS (Ta = 25°C, VEE = -5.2V)

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)			30.000	170.000	MHz
Frequency Stability	30.000 ~ 170.000	All Conditions *	-100	+100	PPM
Temperature Range	30.000 ~ 170.000				
Operating (TOPR)			-10	+70	°C
Storage (TSTG)			-55	+125	
Supply Voltage	30.000 ~ 170.000				
F5500AC (VEE)			-5.46	-4.94	V
F5500BC (VCC)			+4.75	+5.25	
Input Current (IDD)	30.000 ~ 170.000	F5500AC		50	mA
		F5500BC		60	
Output Symmetry	30.000 ~ 170.000	50% Vp-p	40	60	%
Rise Time (TR)	30.000 ~ 170.000	20%Vp-p ~ 80%Vp-p		2.0	nS
Fall Time (TF)	30.000 ~ 170.000	80%Vp-p ~ 20%Vp-p		2.0	
Output Voltage (VOL)	30.000 ~ 170.000	F5500AC		-1.60	V
(VOH)		F5500BC		+3.42	
		F5500AC	-0.98		
		F5500BC	+4.00		
Output Load	30.000 ~ 170.000	ECL Load		5	Gates
Overlap Time	30.000 ~ 170.000	50% Vp-p		0.5	nS
Start-up Time (Ts)	30.000 ~ 170.000			10	mS

\* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration. See page 33 for environmental/mechanical specifications, test circuits, and output waveform. All specifications subject to change without notice. Rev. 10/1/96



Tolerances are ±0.008 (±0.2) unless otherwise specified

#### Pin Connections (F5500AC)

- #1 Output 2 #3 Output 1
- #2 -5.2V (case) #4 GND

#### Pin Connections (F5500BC)

- #1 Output 2 #3 Output 1
- #2 GND (case) #4 +5.0V

Inch dimensions shall govern.  
All dimensions are in inches & parenthetically in millimeters.