

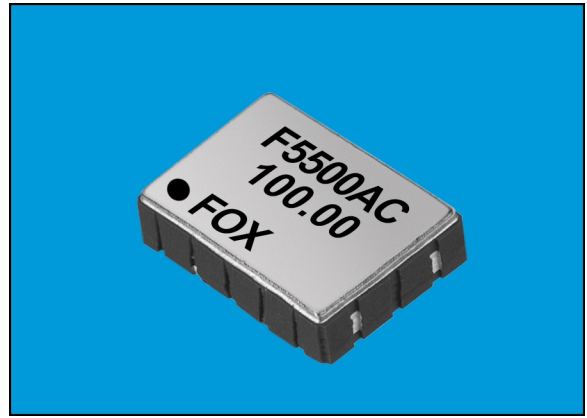
# SMD COMPLEMENTARY OUTPUT ECL OSCILLATOR

## 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

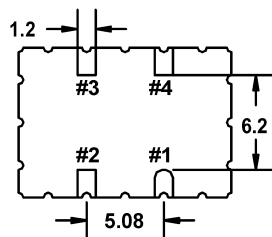
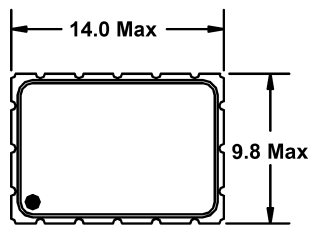
- High Frequency Range
- Negative or Positive Supply Voltages (PECL)
- Complementary Outputs
- Available in  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$  (F5500ACR, F5500BCR)



OSCILLATORS

• ELECTRICAL CHARACTERISTICS					
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	$^{\circ}\text{C}$
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 F5500BC		50 60	mA
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 F5500BC		-1.60 +3.42	V
(VOH)		F5500AC F5500BC	-0.98 +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  $25^{\circ}\text{C}$  tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.  
See page 44 for mechanical specifications, test circuits, and output waveform.  
All specifications subject to change without notice. Rev. 03/02/00

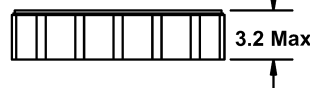


#### Pin Connections (F5500AC)

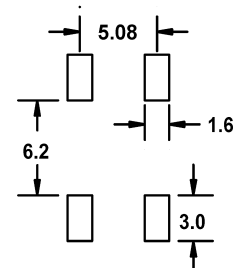
#1 Output 2    #3 Output 1  
#2 -5.2V (Case)    #4 GND

#### Pin Connections (F5500BC)

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



#### Recommended Solder Pad Layout



All dimensions are in millimeters.

See page 74 for tape and reel specifications.