

5.0V PLASTIC HCMOS/TTL SMD OSCILLATOR

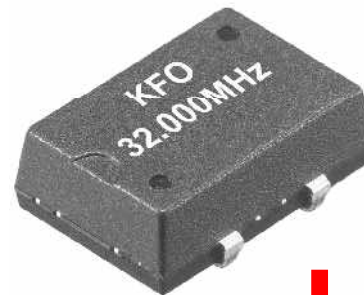
KFO SERIES

FEATURES

- 5.0V Operation
- HCMOS/TTL Output
- Tri-State Enable/Disable
- Tape and Reel (1,000 pcs. STD)

OPTIONS

- 3.3V Operation (KFO30AT)



Discontinued

• MODEL NUMBER SELECTION

Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
KFO90AT	±100PPM	-10 ~ +70	1.500 ~ 67.000
KFO90FT	±100PPM	-40 ~ +85	1.500 ~ 67.000
KFO95AT	±50PPM	-10 ~ +70	1.500 ~ 67.000

• ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (F _o)	1.500 ~ 67.000 MHz
Storage Temperature Range (T _{STG})	-55°C ~ +125°C
Supply Voltage (V _{DD})	5.0V ± 10%
Input Current (I _{DD})	
1.500 ~ 32.000 MHz	27mA
32.000+ ~ 50.000 MHz	45mA
50.000+ ~ 67.000 MHz	60mA
Output Symmetry (50% V _{DD})	
1.500 ~ 50.000 MHz	45% ~ 55%
50.000+ ~ 67.000 MHz	40% ~ 60%
Rise Time (10% ~ 90% V _{DD}) (T _R)	7nS
Fall Time (90% ~ 10% V _{DD}) (T _F)	7nS
Output Voltage (V _{OL})	10% V _{DD}
(V _{OH})	90% V _{DD} Min
Output Current (I _{OL})	16mA Min
(I _{OH})	-16mA Min
Output Load	
TTL	10TTL
HCMOS	50pF
Start-up Time (T _s)	10mS
Enable/Disable Time ²	100nS

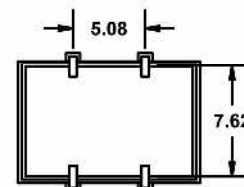
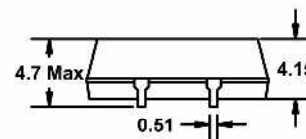
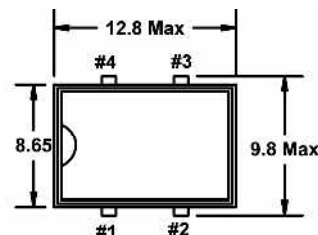
¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

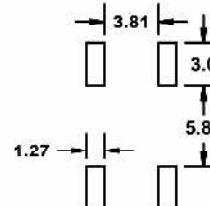
See page 30 for mechanical specifications, test circuits, and output waveform.

Note: A 0.01μF bypass capacitor should be placed between V_{DD} (Pin 4) and GND (Pin 2) to minimize power supply line noise.

All specifications subject to change without notice. Rev. 02/10/03



Recommended Solder Pad Layout



Pin Connections

#1 E/D #3 Output
#2 GND #4 V_{DD}

All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION

INH (Pin 1)	OUTPUT (Pin 3)
OPEN ²	ACTIVE
'1' Level V _{IH} ≥ 2.2 V	ACTIVE
'0' Level V _{IL} ≤ 0.8 V	High Z

See page 60 for tape and reel specifications.