



1.8V HCMOS SMD OSCILLATOR WITH STANDBY MODEL: F4500 SERIES



FEATURES

- 1.8V Operation
- HCMOS Output
- Low Power Consumption
- Standby Function
- Tape and Reel (2,000 pcs. STD)



• PART NUMBER SELECTION Learn More - Internet Required				
Part Number	Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
528-Frequency-xxxxx	F4500	±100PPM	-10 ~ +70	1.800 ~ 125.000
529-Frequency-xxxxx	F4500R	±100PPM	-40 ~ +85	1.800 ~ 125.000
530-Frequency-xxxxx	F4505	±50PPM	-10 ~ +70	1.800 ~ 125.000
531-Frequency-xxxxx	F4505R	±50PPM	-40 ~ +85	1.800 ~ 125.000
532-Frequency-xxxxx	F4506	±25PPM	-10 ~ +70	1.800 ~ 125.000
533-Frequency-xxxxx	F4506R	±25PPM*	-40 ~ +85	1.800 ~ 125.000
534-Frequency-xxxxx	F4508	±20PPM*	-10 ~ +70	1.800 ~ 125.000

• ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	1.800 ~ 125.000 MHz
Storage Temperature Range (T _{STG})	-55°C ~ +125°C
Supply Voltage (V _{DD})	1.8V ± 5%
Input Current (I _{DD})	
1.000 ~ 32.100 MHz	7mA
32.100+ ~ 70.000 MHz	15mA
Output Symmetry (50% V _{DD})	40% ~ 60%
Rise Time (20% ~ 80% V _{DD}) (T _R)	
1.800 ~ 32.100 MHz	5nS
32.100+ ~ 70.000 MHz	3.5nS
Fall Time (80% ~ 20% V _{DD}) (T _F)	
1.800 ~ 32.100 MHz	5nS
32.100+ ~ 70.000 MHz	3.5nS
Output Voltage (V _{OL})	20% V _{DD}
(V _{OH})	80% V _{DD} Min
Output Current (I _{OL})	2mA Min
(I _{OH})	2mA Min
Output Load (HCMOS)	15pF
Standby Current	10µA
Start-up Time (T _s)	10mS
Output Disable Time ²	300nS
Output Enable Time ²	10mS

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

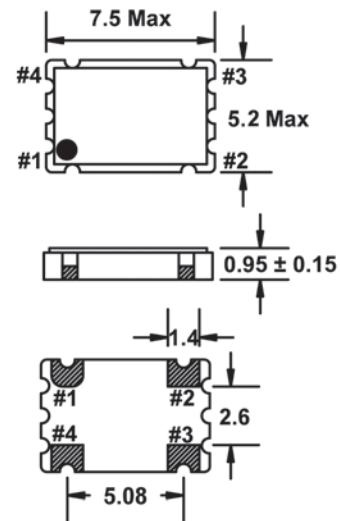
² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

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

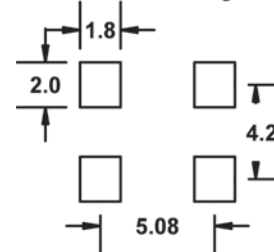
All specifications subject to change without notice. Rev. 1/24/05

Learn more about:
[Part Marking Identification](#)
[Tape and Reel Specification](#)
[Mechanical Specification](#)

Internet required



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} ≥ 70% V _{DD}	ACTIVE
'0' Level V _{IL} ≤ 30% V _{DD}	High Z

See page 60 for tape and reel specifications.