

3.3V HCMOS CERAMIC SMD OSCILLATOR WITH STANDBY

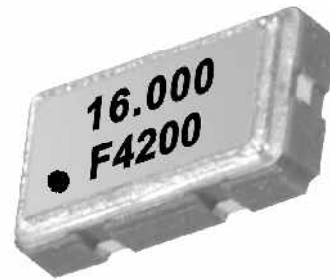
F4200 SERIES

FEATURES

- 3.3V Operation
- HCMOS Output
- Standby Function
- Tape and Reel (2,000 pcs. STD)
- Pb Free

OPTIONS

- 5.0V (F3400) Version Available



• MODEL NUMBER SELECTION

Model Number	Frequency Stability ¹	Operating Temperature (°C)	Frequency Range (MHz)
F4200	±100PPM	-10 ~ +70	1.544 ~ 50.000
F4200R	±100PPM	-40 ~ +85	1.544 ~ 50.000
F4205	±50PPM	-10 ~ +70	1.544 ~ 50.000
F4205R	±50PPM	-40 ~ +85	1.544 ~ 50.000
F4206	±25PPM	-10 ~ +70	1.544 ~ 50.000
F4206R	±25PPM	-40 ~ +85	1.544 ~ 50.000
F4208	±20PPM	-10 ~ +70	1.544 ~ 50.000

• ELECTRICAL CHARACTERISTICS

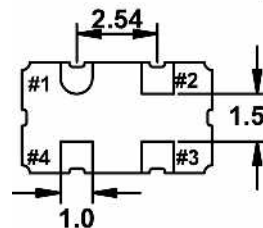
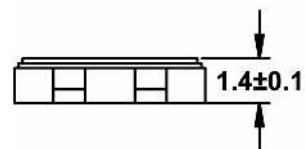
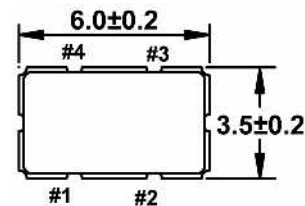
PARAMETERS	MAX (unless otherwise noted)
Frequency Range (F _o)	1.544 ~ 50.000 MHz
Storage Temperature Range (T _{STG})	-40°C ~ +85°C
Supply Voltage (V _{DD})	3.3V ± 10%
Input Current (I _{DD})	20mA
Output Symmetry (50% V _{DD})	40% ~ 60%
Rise Time (10% ~ 90% V _{DD}) (T _R)	6nS
Fall Time (90% ~ 10% V _{DD}) (T _F)	6nS
Output Voltage (V _{OL})	10% V _{DD}
(V _{OH})	90% 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	150nS
Output Enable Time ²	10mS

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

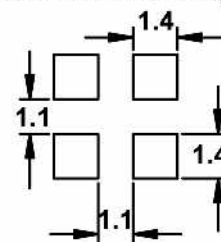
² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

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

All specifications subject to change without notice. Rev. 06/16/03



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

See page 60 for tape and reel specifications.