

5.0V HCMOS SMD OSCILLATOR F3345 SERIES

FEATURES

- 5.0V Operation
- HCMOS/TTL Output
- Tri-State Enable/Disable
- Tape and Reel (2,000 pcs. STD)
- Pb Free

OPTIONS

- 1.05mm Height Max
- Standby Function (F4101)



| • MODEL NUMBER SELECTION | | | |
|--------------------------|----------------------------------|----------------------------|-----------------------|
| Model Number | Frequency Stability ¹ | Operating Temperature (°C) | Frequency Range (MHz) |
| F3345 | ±100PPM | -10 ~ +70 | 1.000 ~ 80.000 |
| F3345R | ±100PPM | -40 ~ +85 | 1.000 ~ 80.000 |
| F3340 | ±50PPM | -10 ~ +70 | 1.000 ~ 80.000 |
| F3340R | ±50PPM | -40 ~ +85 | 1.000 ~ 80.000 |
| F3346 | ±25PPM | -10 ~ +70 | 1.000 ~ 80.000 |
| F3346R | ±25PPM | -40 ~ +85 | 1.000 ~ 80.000 |
| F3348 | ±20PPM | -10 ~ +70 | 1.000 ~ 80.000 |

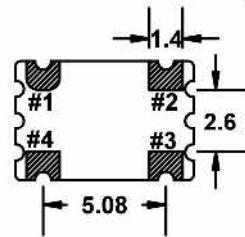
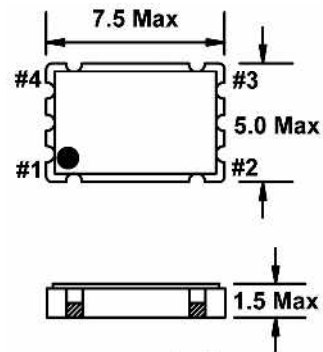
| • ELECTRICAL CHARACTERISTICS | |
|--|------------------------------|
| PARAMETERS | MAX (unless otherwise noted) |
| Frequency Range (F _o) | 1.000 ~ 80.000 MHz |
| Storage Temperature Range (T _{STG}) | -55°C ~ +125°C |
| Supply Voltage (V _{DD}) | 5.0V ± 10% |
| Input Current (I _{DD}) | |
| 1.000 ~ 25.000 MHz | 25mA |
| 25.000+ ~ 50.000 MHz | 40mA |
| 50.000+ ~ 67.000 MHz | 60mA |
| 67.000+ ~ 80.000 MHz | 73mA |
| Output Symmetry (50% V _{DD}) | 45% ~ 55% |
| Rise Time (10% ~ 90% V _{DD}) (T _R) | 5nS |
| Fall Time (90% ~ 10% V _{DD}) (T _F) | 5nS |
| 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.

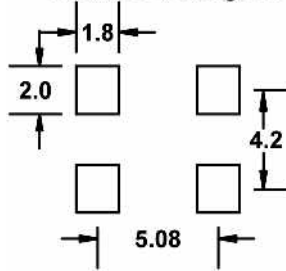
² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open. See page 30 for mechanical specifications, test circuits, and output waveform.

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
- #2 GND
- #3 Output
- #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.