

Programmable Oscillators

7.0 x 5.0mm SMD

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FEATURES

- Short lead time production, 1 day to 1 week
- Standard 7.0 x 5.0mm SMD package
- Frequency Range 1.0MHz to 200MHz
- Supply voltage: 1.8, 2.5 or 3.3 Volts
- Tristate function for power conservation



DESCRIPTION

HB57 oscillators are well-specified components with the advantage of quick turnround in production. Usually less than one week from order. The parts have low jitter and phase noise.

SUPPLY VOLTAGE/CURRENT CONSUMPTION/RISE AND FALL TIME

| Supply Voltage | +1.8VDC±10% Code = '18' | +2.5VDC±5% Code = '25' | +3.3VDC±10% Code = '3' |
|---------------------------------|---|---|---|
| Current Consumption (25MHz) | 2.5mA max. (15pF) | 3.0mA max. (15pF) | 4.0mA max. (15pF) |
| PLL Off: Supply Current (25MHz) | 2.0mA max. (15pF) | 2.5mA max. (15pF) | 4.0mA max. (15pF) |
| Supply Current (200MHz) | 8.0mA max. (15pF) | 13.0mA max. (15pF) | 20mA max. (15pF) |
| PLL On: Supply Current (200MHz) | 8.5mA max. (15pF) | 12.5mA max. (15pF) | 20mA max. (15pF) |
| Rise/Fall Time | 4.0ns (25MHz PLL off) 1.5ns (200MHz PLL off) | 3.0ns (25MHz PLL off) 1.5ns (200MHz PLL off) | 3.0ns (25MHz PLL off) 1.5ns (200MHz PLL off) |
| Available Frequency Range | 1.0 ~ 110.0MHz | 1.0 ~ 166.0MHz | 1.0 ~ 200.0MHz |

GENERAL SPECIFICATION

| | |
|---------------------------------------|---|
| Operating Temperature Range | Commercial: -10° to +70°C Industrial: -40° to +85°C |
| Frequency Stability: | From ±20ppm over -40° to +85°C. See Part Number Format table. |
| Supply Voltage vs. Freq. Sensitivity: | ±1.0ppm (maximum) |
| Output Load: | 15pF max. |
| Duty Cycle: | 50% ±5% |
| Start-up Time: | 0.8ms typ., 5ms max. |
| Storage Temperature Range: | -55° to +150°C |
| Ageing: | ±3ppm max. for first year. |
| Enable/Disable: | Output is high impedance when "0" is applied to pad/pin 1. Enable time is 1ms max. Disable 0.1µs max. |
| RoHS Status: | RoHS Compliant |

OUTLINES & DIMENSIONS

