

Programmable Oscillators

5.0 x 3.2mm SMD

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FEATURES

- Short lead time production, 1 day to 1 week
- Miniature 5.0 x 3.2mm package
- Frequency Range 1.0MHz to 166MHz
- Supply voltage: 1.8, 2.5 or 3.3 Volts
- Tristate function for power conservation



DESCRIPTION

HB53 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 ANDFALL 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. <i>See Part Number Format table.</i>
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

