HV14 Series Oscillators

14 pin DIL High Frequency HCMOS Clock Oscillator

FEATURES

- Industry-standard 14 pin DIL package
- Frequency Range 125MHz to 200MHz
- High frequency range at low cost
- Supply voltage 2.5V or 3.3Volts
- Tristate function option to conserve power

RoHS COMPLIANT 2002 / 95 /EC

DESCRIPTION

HV14 series oscillators are designed to provide a high quality HCMOS output at high frequencies from 125MHz to 200MHz. Phase and RMS period jitter are kept within low limits. An enable/disable function is standard and the oscillator may also be specified with a power down function.

SPECIFICATION

Frequency Range:	125.0MHz to 200.0MHz
Output Logic:	HCMOS
Phase Jitter:	3.5ps typical
RMS Period Jitter:	4.0ps typical
Frequency Stability	
Commercial:	±25ppm to ±100ppm -10° to +70°C
Industrial:	±25ppm to ±100ppm -40° to +85°C
Input Voltage:	+2.5V to +3.3VDC ±10%
Output Voltage	
High '1':	+2.97V minimum
Low '0':	+0.33 V maximum
Rise/Fall Time:	0.25ns typical, 0.5ns max. (20%Vdd to 80%Vdd)
Current Consumption:	80mA typical (Frequency dependent)
Load:	15pF
Start-up Time:	5ms typical, 10ms maximum
Duty Cycle:	50% ±5% (Measured at Vdd-1.3V)
Input Static	
Discharge Protection:	2kV maximum
Ageing:	±2pmm per year maximum

ABSOLUTE MAXIMUM RATINGS

Permanent damage may occur if units are operated beyond specified limits.

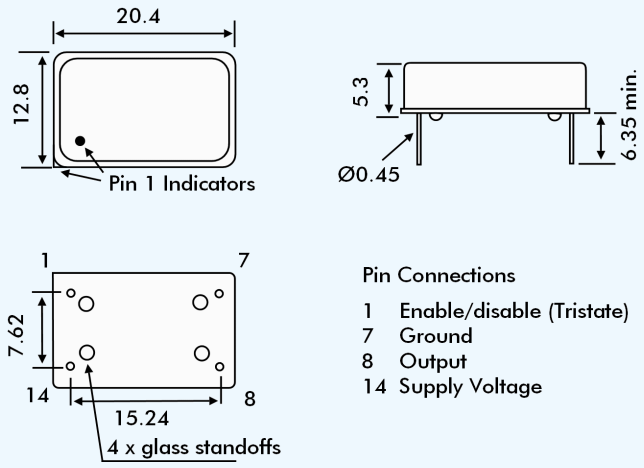
Supply Voltage:	+4.6 VDC max.
Input Voltage Vi:	Vss-0.5 min., Vdd +0.5V max.
Input Voltage Vo:	Vss-0.5 min., Vdd +0.5V max.

PART NUMBER SCHEDULE

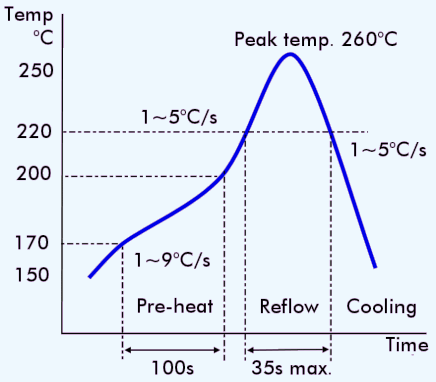
Example: 3HV14GC-150.000

- Supply Voltage
  - 25 = 2.5 Volts
  - 3 = 3.3 Volts
- Series Designation
- RoHS Compliance
- Stability Code
  - A = ±25ppm -10°~+70°C
  - B = ±50ppm -10°~+70°C
  - C = ±100ppm -10°~+70°C
  - D = ±25ppm -40°~+85°C
  - E = ±50ppm -40°~+85°C
  - F = ±100ppm -40°~+85°C
- Nominal Frequency:

OUTLINE & DIMENSIONS



SOLDER TEMPERATURE PROFILE



TRISTATE

DISABLE	Output is disabled when Pin 1 is taken below 0.3 Vcc referenced to ground Oscillator is continues to run.
ENABLE	Oscillator is enable when Pin 1 is taken above 0.7 Vcc referenced to ground.
POWER DOWN	Available by special request: Oscillator shuts down when disabled.

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