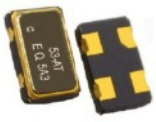
5 x 3.2mm SMD Dual Frequency Oscillator

FEATURES

- **Dual frequencies always available**
- **Miniature 5.0 x 3.2mm package**
- **Frequency Range 1.0MHz to 200MHz**
- **Low supply current**
- **Supply voltage range, 1.8, 2.5V or 3.3 Volts**

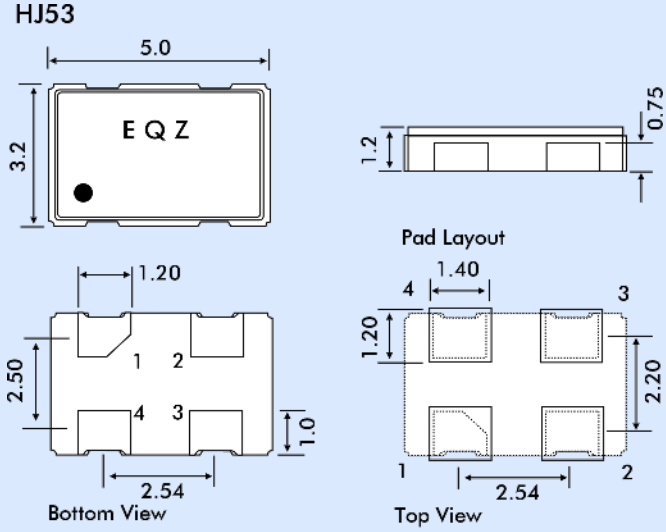
RoHS



DESCRIPTION

HC53 oscillators provide dual frequencies from one oscillator.

OUTLINE & DIMENSIONS



SPECIFICATION

Power Supply Voltage:	+1.8V, +2.5V or +3.3 VDC±5%
Frequency	
Vdd = +1.8V:	Option 1/2 = 1MHz to 133MHz
Vdd = +2.5V:	Option 1/2 = 1MHz to 166MHz
Vdd = +3.3V:	Option 1/2 = 1MHz to 200MHz
Package:	5.0 x 3.2mm Ceramic Leadless SMD
Frequency Stability over Temperature*	
-10° to +70°C:	±15ppm, ±25ppm, or ±50ppm
-40° to +85°C:	±25ppm, ±50ppm, ±100ppm
Output Load:	15pF max (CMOS)
Current Consumption:	From 4mA to 50mA *Frequency dependent*
Duty Cycle:	50%±5%. Measured at 50%Vdd, CL = 15pF
High Level Output Voltage (VOH) (Vdd = +3.3V):	2.90V min., condition IOH = -4mA
Low Level Output Voltage (VOL) (Vdd = +3.3V):	0.40V max., condition IOL = +4mA
Rise Time (tr):	2.5ns max., 0.1Vdd to 0.9Vdd 15pF load, 3.3 V supply
Fall Time (tf):	2.5ns max., 0.9Vdd to 0.1Vdd 15pF load, 3.3 V supply
Start-Up Time:	10ms maximum
Ageing:	±5ppm max. first year <±2ppm per year thereafter
Tape & Reel	16mm tape, 180mm reel 1000 pieces per reel

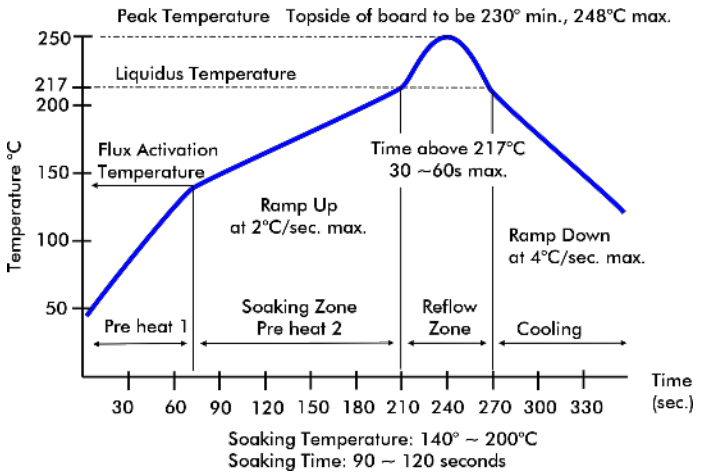
** Inclusive of 25°C calibration, tolerance, operating temperature range, input voltage variation, load change, ageing, shock and*

ENVIRONMENTAL SPECIFICATION

RoHS Status:	RoHS Compliant and pB free
Moisture Sensitivity Level:	Level 1 (Infinite) according to IPC/JEDEC J-STD-020D.1
Operating Temperature Range:	-10° to +70°C or -40° to +85°C
Storage Temperature Range:	-55° to +125°C
Humidity:	85% RH, 85°C, 48 hours
Fine Leak:	MIL-STD-883, method 1014 Condition A
Gross Leak:	MIL-STD-883, method 1014 Condition C
Solderability:	MIL-STD-202F method 208E
Reflow:	260°C for 10 seconds
Vibration:	MIL-STD-202F method 204 35g , 50 to 2000Hz.
Shock:	MIL-STD-202F method 213B test cond. E, 1000g ½ sinewave
Resistance to Solvents:	MIL-STD-202, method 215
Temperature Cycling:	MIL-STD-883, method 1010
ESD Rating:	2kV max. Human body model
Pad Surface Finish:	Gold (Au 0.3%µm min.) over nickel (N 1.27µm to 8.89µm)
Total Weight:	65mg per unit typical

5 x 3.2mm SMD Dual Frequency Oscillator

SOLDER TEMPERATURE PROFILE



PART NUMBER FORMAT

Example: 3HJ53D-32.0/120.0

3 HJ53 D - 32.0 / 120.0

Supply Voltage
- 3 = 3.3 Volts
- 25 = 2.5 Volts
- 18 = 1.8 Volts

Package HJ53

Stability over temperature range
- 15C = ±15ppm over -10° to -70°C
- A = ±25ppm over -10° to +70°C
- B = ±50ppm over -10° to +70°C
- D = ±25ppm over -40° to +85°C
- E = ±50ppm over -40° to +85°C
- D = ±100ppm over -40° to +85°C

Frequency Output 1 (MHz)

Freqeuency Output 2 (MHz)

EUROQUARTZ LIMITED Blacknell Lane CREWKERNE Somerset UK TA18 7HE
Tel: +44 (0)1460 230000 Fax: +44 (0)1460 230001 info@euroquartz.co.uk www.euroquartz.co.uk