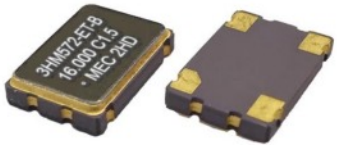
EUROQUARTZ B Series Spread Spectrum Clock Oscillators

'EQHM_B' Spread Spectrum Clock Oscillators 3.0MHz to 200MHz

FEATURES

- **Reduces electromagnetic interferance (EMI) by 12dB to 18dB**
- **Drop-in replacement for conventional oscillators**
- **No need to re-spin the board or solder pad layout**
- **Operates with +2.5V or 3.3V supply voltage**
- **5.0x3.2mm and 7.0x5.0mm sizes available**



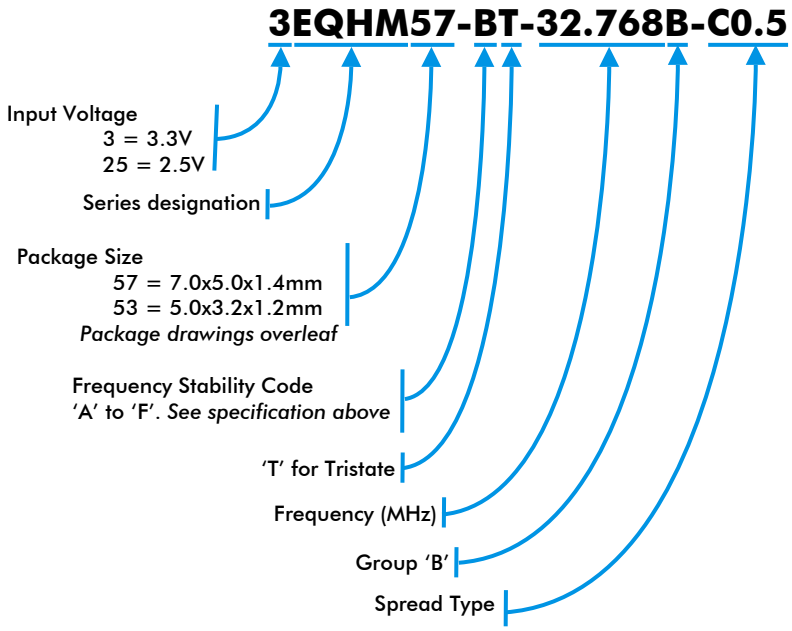
General Specifications at Ta=+25˚C, CL=15pf

Group	B Group	
Package	EQHM53 (5.0 x 3.2 x 1.2mm)	EQHM57 (7.0 x 5.0 x 1.4mm)
Output Waveform	CMOS (square wave)	
Supply Voltage (V_{DD})	+2.5V ±10%	+3.3V ±10%
Frequency Range	3.0MHz ~ 166MHz	3.0MHz ~ 200MHz
Output Logic "High", "1"	2.25V (min.)	2.97V (min.)
Output Logic "Low", "0"	0.25V (max.)	0.33V (max.)

Spread Type	Spread Percentage EMI Reduction Rate			
Center Spread ("C")	±0.125% (C0.125) to ±2.0% (C2.0) in ±0.125% steps			
Down Spread ("D")	-0.25% (D0.25) to -4.0% (D4.0) in 0.25% steps			
Frequency Stablity Code	Frequency Stability over Operating Temperature Range	±25ppm	±50ppm	±100ppm
	Commercial (-10°C to +70°C)	A	B	C
	Industrial (-40°C to 85°C)	D	E	F
Modulation Carrier Freq. (Dither rate)	30kHz (min.) ; 40.0kHz (max.) Frequency dependant. Enquire for details			
Current Consumption	3MHz ~ 100MHz: 20mA (max.); 101MHz ~ 200MHz: 30mA (max.)			
Rise Time/Fall Time	5.0 nsec. (max.), 10% 90% waveform			
Output Load	15pF			
Start-up Time	3.0 msec. (typ.); 5 msec. (Max.)			
Duty Cycle	50% ±10%			
Aging at Ta = +25C	±5ppm per year (max.)			
Storage Temperature	-55°C to +125°C			
Output Enable/Disable Function	Enable	70% (min.) of Vdd to Enable Output		
	Disable	30% (max.) Of Vdd tp Disable Output		
	Output Enable/Disable time: 100 nsec. (Max.)			

PART NUMBER CONFIGURATION

Part Number Example: **3EQHM57-BT-32.768B-C0.5**



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Issue 2

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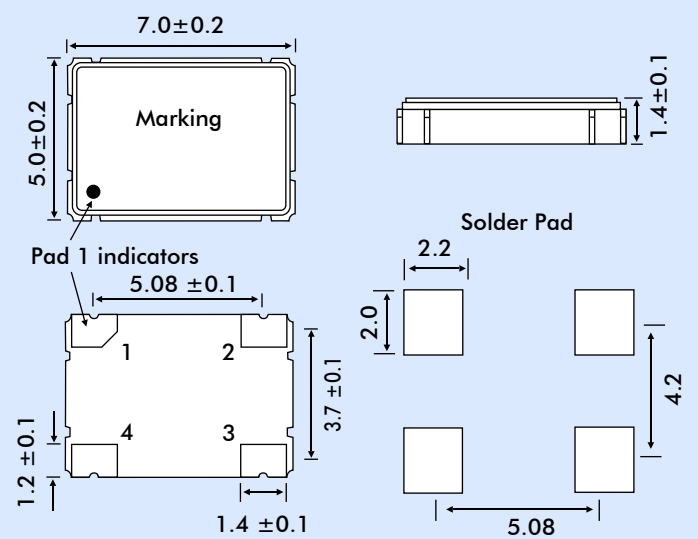
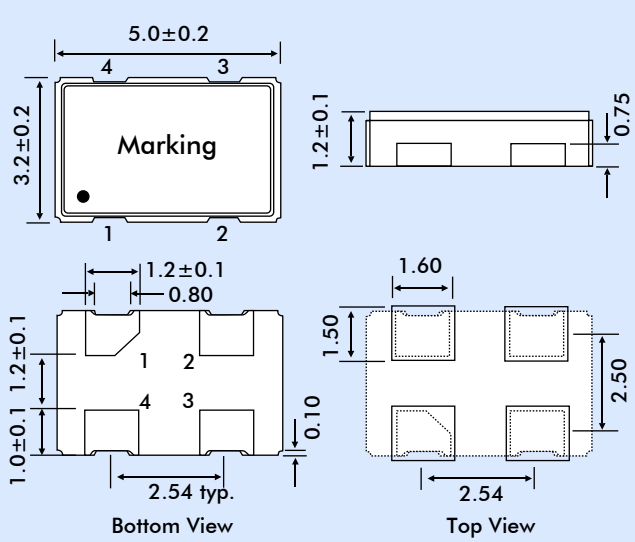
Package Outline & Dimensions

EQHM57



EQHM53



Pad Connections

Pad 1: OE
Pad 2: Ground
Pad 3: Output
Pad 4: Supply Voltage

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