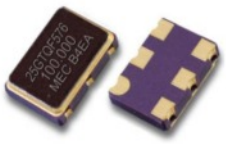
EUROQUARTZ

GQF Series Differential VCXO

EGPQF PECL VCXO — 10MHz to 1,500MHz

FEATURES

- **Ultra Low RMS Jitter**
- **5.0 x 3.2mm, and 7.0 x 5.0mm Package Sizes Available**
- **Low Current Consumption**
- **1 pS RMS Jitter**



RoHS COMPLIANCE

QUIKXO MERCURY QUICK - TURN Oscillators

General Specifications at Ta=+25˚C

Output Logic	PECL		
Model	EGPQF		
Package Size (mm)	EGPQF326 (3.2 x 2.5 x 1.0)	EGPQF536 (5.0 x 3.2 x 1.2)	EGPQF576 (7.0 x 5.0 x 1.7)
Supply Voltage (V_{DD})	2.5V ±5%		+3.3V ±5%
Frequency Range	10MHz (min.) 1,500MHz (max.)		
Output Logic "High", "1"	Vdd - 1.03V (min.) Vdd - 0.6V (max.)		
Output Logic "Low", "0"	Vdd - 1.85V (min.) Vdd - 1.6V (max.)		
Output Load	50Ω into Vdd -2V or Thevenin Equivalent		
Current Consmumption (Vdd = +3.3V)	750MHz: 74 mA (max.) 1,000MHz: 78 mA (max.) 1,350MHz: 82 mA (max.)		
Disable Current	16 mA (typ.)		
Rise / Fall TIme	0.2 nsec (typ.), 0.5 nsec. (max.) (20% to 80% Waveform)		

Frequency Stability Code	Frequency Stability Over Operating Temperature Range	±25 ppm	±50 ppm	±100 ppm
	Commercial (-10˚C to +70˚C)	A	B	C
	Industrial (-40˚C to +85˚C)	D	E	F

Duty Cycle	50±5%							
Start-up Time	10 msec. (Max.)							
RMS Jitter (typ.) (12KHz to 20MHz)	1.0 psec (typ.)							
Phase Noise [dBc / Hz (typ.)]	Offset	10Hz	100Hz	1KHz	10KHz	100KHz	1MHZ	10MHZ
	156.250MHz	-55	-85	-109	-116	-118	-139	-146
	491.52MHz	-61	-86	-100	-105	-105	-126	-137
Storage Temperature	-55˚C to 150˚C							
Aging at Ta = +25C	±2 ppm (max.) First year ; ±10 ppm (max.) Over 10 years							

Control Voltage Center	+1.25V (Vdd = +2.5V)	+1.65V (Vdd = +3.3V)
Control Voltage Range	0.2V ~ +2.3V	+0.3V ~ +3.0V
Frequency Pulling Range	±80 ppm (min.)	±80 ppm (min.)
	Up to ±200 ppm (min.) Available, Contact Us for More Details	
Linearity	±5% (typ.); 10% (max.)	
Transfer Function	Posivite Transfer	
Input Impedance	1MΩ (min.)	
Bandwidth	10KHz (typ.) Measured at -3dB	

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

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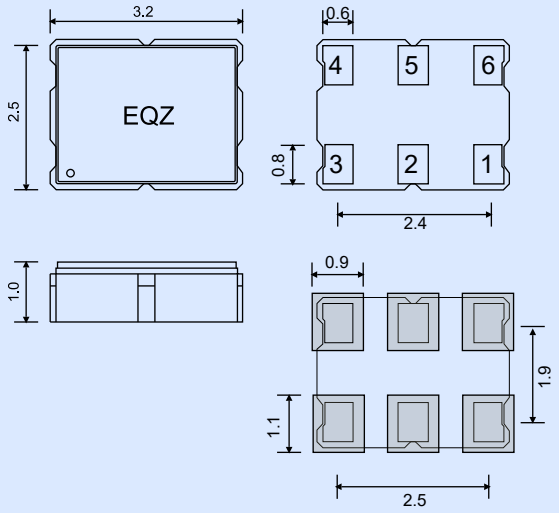
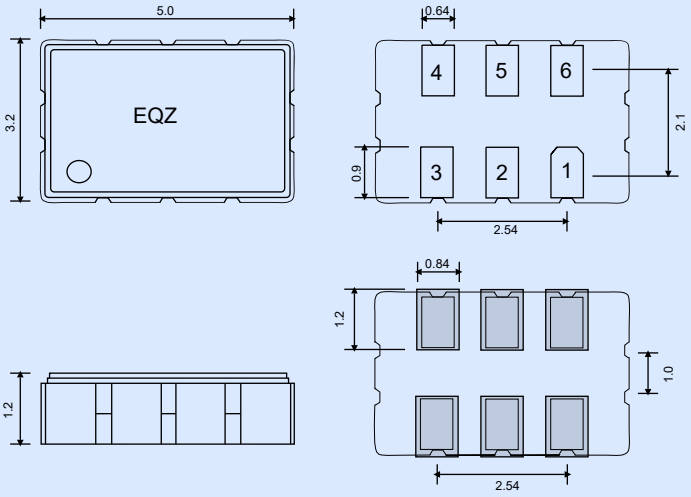
Output Enable Function on Pad 2	
OE Control on Pad 2	70% of Vdd (min.) to enable output. (Open Connection Prohibit) 30% of Vdd (max.) to disable output
Output Enable Time / Disable TIme	200 nsec (max.) / 50 nsec (max.)

Outline DImensions (in mm) and suggested pad layout

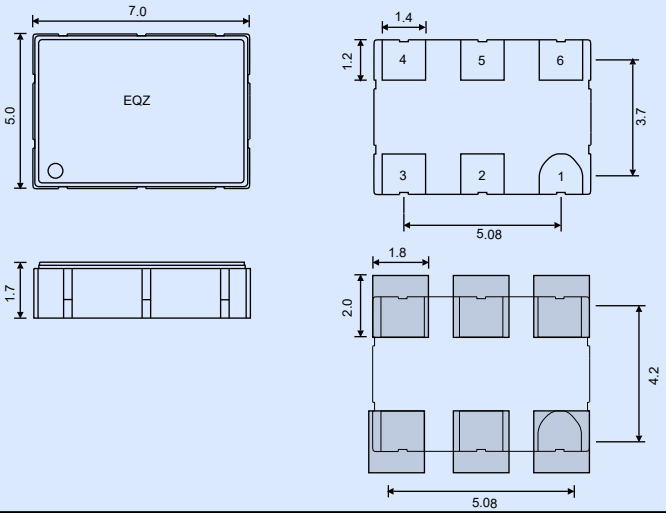
EGPQF326



EGPQF536



EGPQF576



Pad Connections

Pad Connections

Pad 1: VC
Pad 2: OE
Pad 3: Ground
Pad 4: Output
Pad 5: Complimentary Output
Pad 6: Supply Voltage

Part Number Format

EGPQF part numbers are derived as follows:
Example: 200.000 3EGPQF326ET