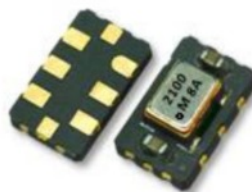


FEATURES

- Support for high frequency (up to 2.1GHz)
- Miniature Product Size
- 300 fs RMS Integrated Phase Jitter


General Specifications at Ta = +25°C

Output Logic	CML		
Models	(V)EMQJF538 & (V)EMQJF326		
Supply Voltage (V _{DD})	+1.8V ±5%	+2.5V ±10%	+3.3V ±10%
Frequency Range	15MHz (min.) 2,100MHz (max.)		
Output Logic "High", "1"	V _{dd} - 0.085V (min.) V _{dd} = (max.)		
Output Logic "Low", "0"	V _{dd} - 0.6V (min.) V _{dd} - 0.32V (max.)		
Output Load	50Ω into V _{dd}		
Current Consumption (V _{dd} = +3.3V)	70 mA (typ.) 85 mA (max.)		
Disable Current	69 mA (typ.)		
Rise / Fall Time	0.4 nsec. (max.) (20% to 80% Waveform)		

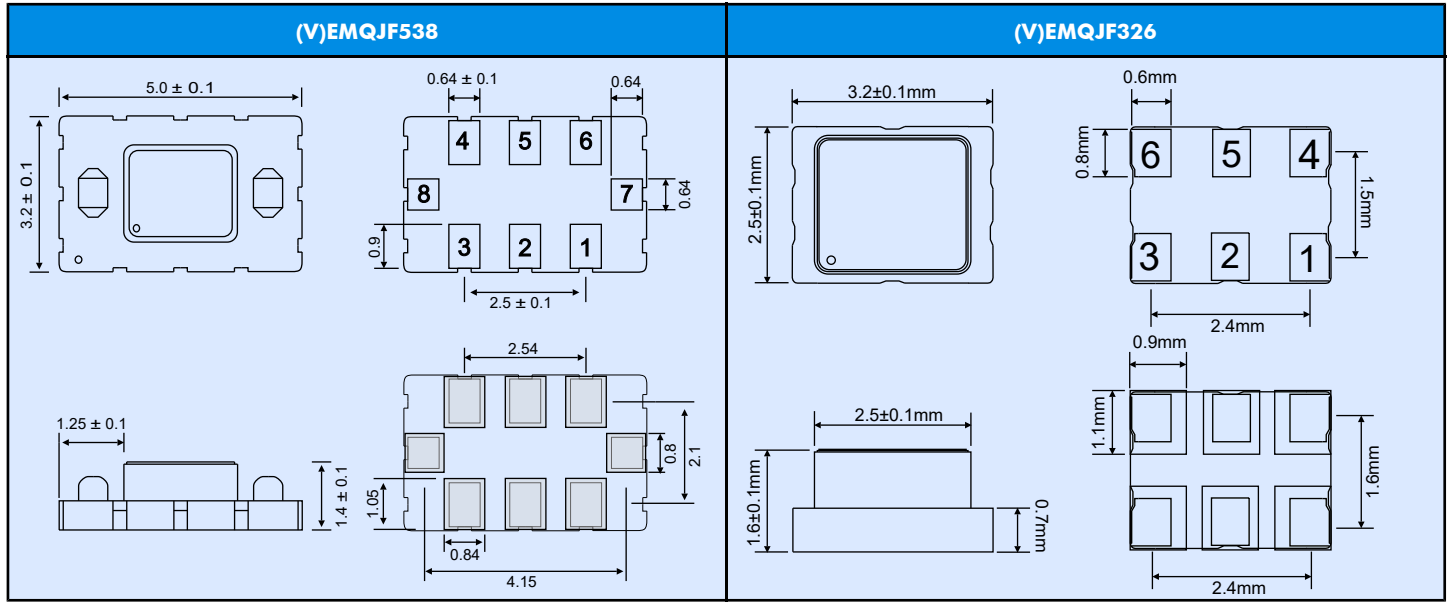
Initial Calibration Tolerance	± 1.0 ppm (max.) at +25°C ± 2°C	
Frequency Stability Codes	Temperature (ref to +25°C)	± 2.5 ppm over -40°C to +85°C (default) ± 1.0 ppm over -40°C to +85°C (available)
	Aging at Ta = +25°C	± 1.0 ppm (max.) Per year
	Voltage Change	± 0.2 ppm (max.), For a ±5% input voltage change
	Load Change	± 0.2 ppm (max.), For a ±10% load condition change
	Reflow	± 1.0 ppm (max.), 1 reflow and measured 24 hours afterwards

Duty Cycle	50±5%
Start-up Time	5 msec. (typ.); 10 msec (max.)
RMS Jitter (typ.) (12KHz to 20MHz)	15MHz ~ 50MHz: 500fsec (typ.), 51MHz ~ 1,200MHz: 250fsec (typ.)
Storage Temperature	-55°C to 150°C

Control Voltage Function on Pad 1	
Control Voltage Center	+1.5V ± 1.0V for both V _{dd} = 2.5V & 3.3V
Control Voltage Range	+0.9V ± 0.6V for both V _{dd} = 2.5V & 3.3V
Frequency Pulling Range	±8 ppm (min.)
Linearity	±1% (typ.); 10% (max.)
Transfer Function	Posivite Transfer
Input Impedance	5MΩ (typ.)

Output Enable Function on Pad 2	
OE Control on Pad 2	70% of V _{dd} (min.) to enable output. 30% of V _{dd} (max.) to disable output
Output Enable Time / Disable Time	2.5 msec (max.) / 10 usec (max.)

Outline Dimensions (in mm) and suggested pad layout



Pad Connections:

- Pad 1: VCTCXO: Control Voltage TCXO: Ground
- Pad 2: OE
- Pad 3: Ground
- Pad 4: Output
- Pad 5: Complimentary Output
- Pad 6: Supply Voltage
- Pad 7: Do not Connect
- Pad 8: Do not Connect

Part Number Format

(V)EMQJF part numbers are derived as follows:
 Example: 100.000 25VEMQJF538-25/-40+85

