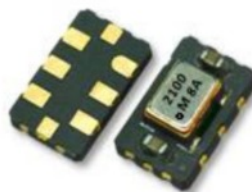


FEATURES

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

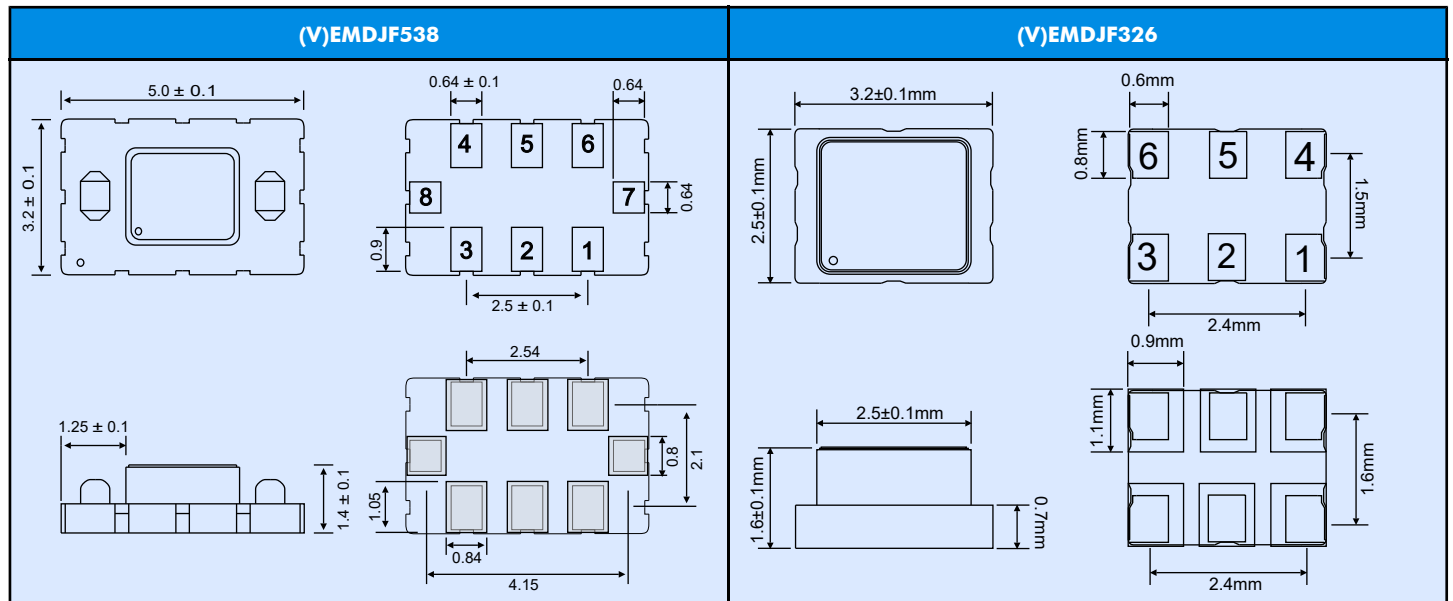

General Specifications at Ta = +25°C

Output Logic	LVDS		
Model	(V)EMDJF538 & (V)EMDJF326		
Supply Voltage (V _{DD})	+1.8V ±5% (Requires AC Coupling)	+2.5V ±10%	+3.3V ±10%
Frequency Range	15MHz (min.) 2,100MHz (max.)		
Output Logic "High", "1"	1.4V (min.) 1.6V (max.)		
Output Logic "Low", "0"	1.1V (min.) 0.9V (max.)		
Output Load	100Ω between output and complimentary output		
Current Consumption (V _{dd} = +3.3V)	75 mA (typ.) 90 mA (max.)		
Disable Current	74 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) ±2.5 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 5: Complimentary Output
Pad 2: OE	Pad 6: Supply Voltage
Pad 3: Ground	Pad 7: Do not Connect
Pad 4: Output	Pad 8: Do not Connect

Part Number Format

(V)EMDJF part numbers are derived as follows:

Example: 100.000 25VEMDJF538-25/-40+85

