PRODUCTS **Voltage Controlled Crystal Oscillator (SMD)**

Typical Applications:

- **Digital Transmission**
- **Instrumentation**

VC31 series
(Voltage Controlled Crystal Oscillator SMD Series)

Part Number: VC31 series - Waveform - Stability- Freq - Vcc - Pulling

Example: VC31SB-12.800-12.0-D

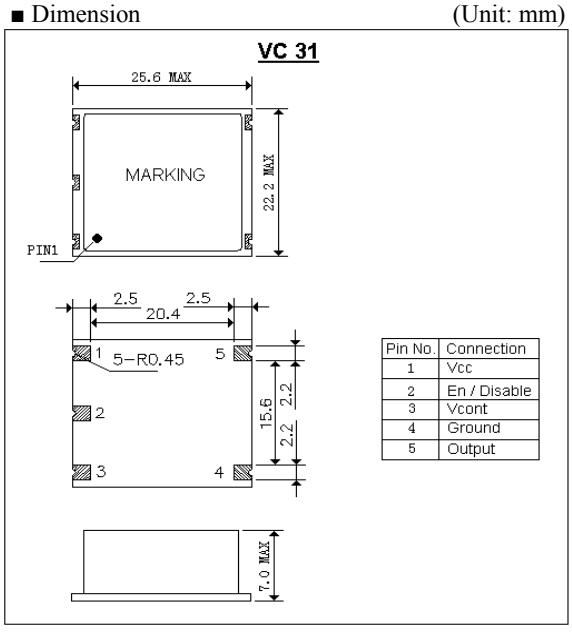
■ Specification

Part No.	Example
VC31 series - Waveform - Stability - Freq - Vcc - Pulling	VC31SB-12.800-12.0-D

Specification	VC31	
Frequency Range	10.000 ~ 40.000MHz	
Output Waveform	HCMOS / TTL	Sinewave / Clipped Sinewave
Load	15pF / 4 TTL	50 ohms / 10 Kohms/10pF
Frequency Stability vs. Temperature (Typical)	A: ±0.05ppm -40°C to +85°C	C: ±0.1ppm -40°C to +85°C
	B: ±0.28ppm -20°C to +70°C	D: ±0.05ppm -20°C to +70°C
Frequency Stability vs Calibration (@25°C)	±0.3ppm max.	
Storage Temperature Range	-50°C to +90°C	
Rise and Fall Time	10 nsec max. (10% / 90% Vout)	
Frequency Stability vs. Load Deviation	±0.05ppm max. @ ±10% variation from standard load	
Frequency Stability vs. Supply Deviation	±0.05ppm max. @ ±5% variation from nominal supply	
Frequency Stability vs. Aging	±1.0ppm/year max.	
Supply Voltage (Vcc)	12V, 5V, 3.3V(optional) ±5%	
Current	10mA max.	
Duty Cycle (Typical)	40 / 60% (at 50% Vcc)	
Pulling	N: No frequency adjustment / D: ±8ppm (typ.)	
Phase Noise (@1KHz)	-135dBc / Hz (No PLL)	-125dBc / Hz (PLL)

Note: This is a typical parameter spec., please contact us for detail specification sheet.

■ Dimension (Unit: mm)



Pin No.	Connection
1	Vcc
2	En / Disable
3	Vcont
4	Ground
5	Output

HIGH PRECISION OSCILLATOR