

MV-XC285-1313C is a Crystal Oscillator (XO) . This XO provides low jitter performance, CMOS output and comes in a Half Dip, Through Hole 12.7x12.7mm package. This device contains an internal voltage regulator resulting in excellent power supply rejection ratio.

The device is qualified to meet the JEDEC standard for Pb-Free assembly and compliant to the RoHS directive.

Electrical Performance

Parameter	Min	Typ	Max	Units
General				
Output Frequency	0.75		250	MHz
Operating Temperature		-10/+70 to -40/+85		°C
Frequency Stability				
Stability Over Temperature		±50 to ±20		ppm
Aging (Initial 1st year)			±3	ppm
Start Up Time			5	ms
Package Size		12.7 x 12.7 x 5.1		mm
Supply				
Supply Voltage (Vdd)		+3.3 to +5.0		V
Supply Current				
≤ 40 MHz		15	20	mA
≤ 80 MHz		25	35	mA
> 80 MHz (@3.3V)		50		mA
Output				
Output Signal		CMOS		
Output Logic Level				
Output Level - Logic High	Vdd x 0.9			V
Output Level - Logic Low			Vdd x 0.1	V
Output Load		15 pF		
Output Rise and Fall Time			10	ns
Duty Cycle	40		60	%
Enable / Disable				
Output Enable / Disable				
Output Enabled	Vdd x 0.7			V
Output Disabled			Vdd x 0.3	V
Phase Noise & Jitter				
Phase Noise: (125 MHz)				
Jitter				
RMS Jitter: (12kHz - 20MHz) - 125 MHz		1.0		ps

Notes:

- 1 5V option only available up to 105 MHz

Maximum Ratings

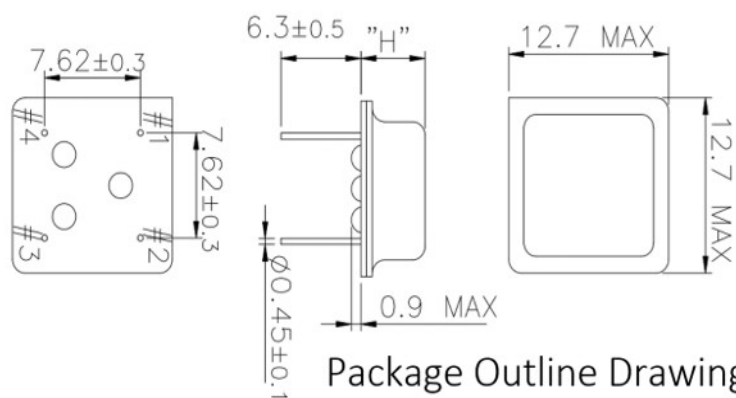
Storage Temp	-55°C to 125°C
Supply Voltage	0V to +5.5V
Enable/Disable Voltage	-0.5 to Vdd +0.5
Junction Temperature	+125 °C

Maximum Ratings Notes:

- 1 Stresses in excess of the absolute maximum ratings can permanently damage the device.
- 2 Exposure to absolute maximum ratings for extended periods may adversely affect device reliability.

Package Information

Pin #	Function
Pin 1	E/D = Enable / Disable or NC (Tri-State)
Pin 2	GND = Ground
Pin 3	OUT = Output
Pin 4	Vdd = Supply Voltage


Handling and Construction

Package Construction	Half Dip, Through Hole
Moisture Sensitivity Level	MSL 1
ESD, Human Body Model	500V
ESD, Charge Device Model	500V

Ordering Information
MV-XC285-1313C -

XO, CMOS

12.7 x 12.7 x 5.1mm, 4 Pins

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- xxxMxxxx

Frequency

① Voltage

A: 5.0 V

B: 3.3 V

② Temp Range

J: -10/+70 °C

H: -20/+70 °C

K: -40/+85 °C

③ Temp Stability

C: ±50 ppm

E: ±25 ppm

F: ±20 ppm

④ Enable

T: Tri-State