



- ▶ Very low RMS jitter
- ▶ Short Lead time
- ▶ Pb Free/RoHS2 Compliant
- ▶ MSL 1
- ▶ Peak solder temp +260°C (10 sec)

ECSpresCON™ ECXV-H HCMOS VCXO

ECXV-H2 (2.5V) and ECXV-H3 (3.3V) low jitter, low current Frequency Configurable SMD Voltage Controlled Crystal Oscillators (VCXO).

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECXV-H2 (+2.5V)			ECXV-H3 (+3.3V)			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
Frequency Range		10.000		250.000	10.000		250.000	MHz
Supply Voltage		+2.375	+2.5	+2.625	+2.97	+3.3	+3.63	VDC
Voltage Control		+0.2	+1.25	+2.3	+0.3	+1.65	+3.0	VDC
Frequency Pulling Range (Positive Transfer)	7X5 & 5X3.2 Pkg	±100			±100			ppm
	3.2X2.5 & 2.5X2 Pkg	±50			±50			ppm
Frequency Stability *	Option A			± 100			± 100	ppm
	Option B			± 50			± 50	ppm
	Option C			± 25			± 25	ppm
	Option D			± 20			± 20	ppm
Input Current	10.0 to 50.0 MHz			20			25	mA
	50.1 to 150.0 MHz			25			30	mA
	150.1 to 250 MHz			35			40	mA
Output Symmetry	@ 50%Vcc level			48/52			48/52	%
Aging	@ +25°C (first year)			±2			±2	ppm
Rise and Fall Times	10% Vdd to 90% level	600		1500	600		1500	ps
"0" level	VOL			10% Vdd			10% Vdd	VDC
"1" level	VOH	90% Vdd			90% Vdd			VDC
Output Load	HCMOS			15			15	pF
Output Enable	Pin 2 **	0.7%			0.7%			Vdd
Output Disable	Pin 2			0.3%			0.3%	Vdd
Output Enable Time				200			200	ns
Output Disable Time				50			50	ns
Phase Jitter, rms	12 KHz to 20 MHz		1.0			1.0		pS
Operating Temperature (Specified in P/N)	Standard	-10		+70	-10		+70	°C
	Extended (P Option)	-40		+105	-40		+105	°C
Storage Temperature		-55		+125	-55		+125	°C
Moisture Sensitivity Level		1						
Termination Finish		Au						
ESD Sensitivity	Human Body Model	3 kV Max.						

Part Number Guide						
Series	Voltage	Package	Stability	Pull Range (***)	Operating Temp	Frequency
ECXV-H (HCMOS Output)	2 = +2.5V 3 = +3.3V	2 = 2.5 x 2 mm 3 = 3.2 x 2.5 mm 5 = 5 x 3.2 mm 7 = 7 x 5 mm	A = ±100 ppm B = ±50 ppm C = ±25 ppm D = ±20 ppm	1 = ±50 ppm 2 = ±90 ppm 3 = ±100 ppm	L = -10 ~ +70°C M = -20 ~ +70°C N = -40 ~ +85°C P = -40 ~ +105°C	- Customer Specified



Dimensions (mm)

7 = 7x5 Package 5 = 5x3.2 Package 3 = 3.2x2.5 Package 2 = 2.5x2 Package

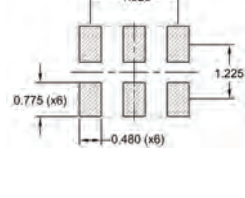
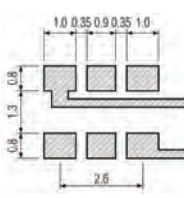
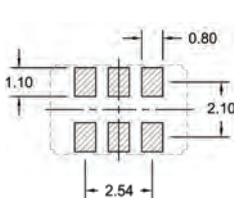
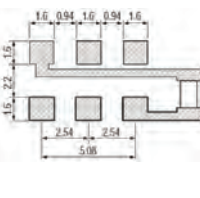
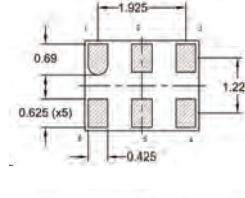
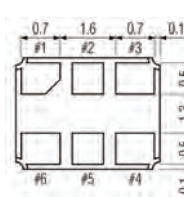
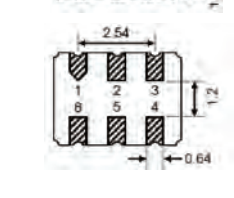
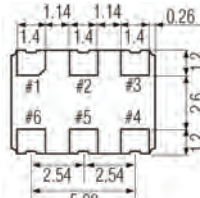
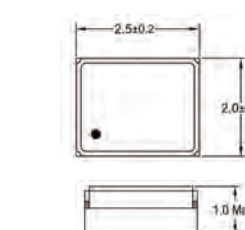
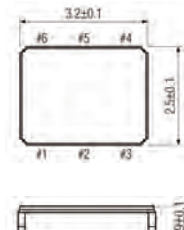
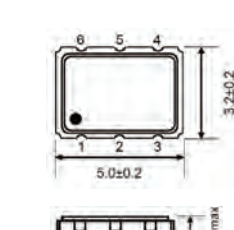
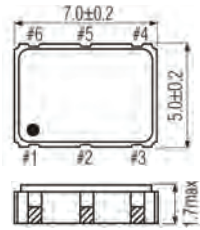


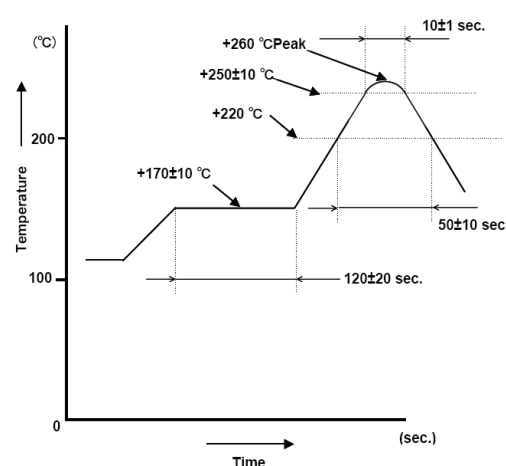
Figure 1) Top, Side, Bottom & Land

Figure 2) Top, Side, Bottom & Land

Figure 3) Top, Side, Bottom & Land

Figure 4) Top, Side, Bottom & Land

Suggested Reflow Profile



Pin Connections	
Pin #	Function
1	Control Voltage
2	OE: High Enable
3	Ground
4	Output
5	No Connect
6	Supply Voltage