

The ECS-P83X (3.3V) and ECS-P85X (5V) 8 pin DIP is a programmable crystal controlled oscillator. The standard 8 pin DIP footprint is ideal for existing PC boards.

[Request a Sample](#)

## OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

### ECS-P83X/P85X



- Programmable (1 Time)
- 3.3V and 5V Options
- PLL Technology
- 8 pin DIP footprint
- Extended temp range
- PbFree/RoHS Compliant

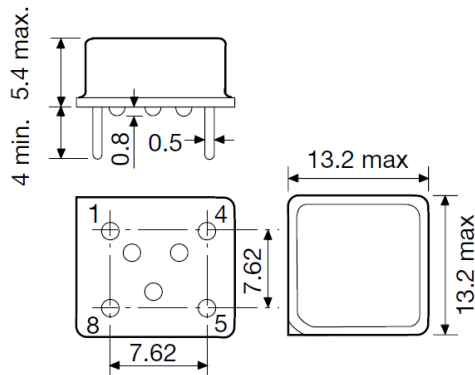
Parameters	Conditions	ECS-P83X (+3.3V)			ECS-P85X (+5V)			Units
		MIN	TYP	MAX	MIN	TYP	MAX	
<b>Frequency Range</b>		1.000		125.000	1.000		150.000	MHz
<b>Operating Temperature</b>	Standard	0		+70	0		+70	°C
	Extended (N Option)	-40		+85	-40		+85	°C
<b>Storage Temperature</b>		-55		+125	-55		+125	°C
<b>Frequency Stability*</b>	Option A			±100			±100	PPM
	Option B			±50			±50	PPM
<b>Input Voltage (VCC)</b>		+2.97	+3.3	+3.63	+4.5	+5.0	+5.5	VDC
<b>Input Current</b>				28			45	mA
<b>Output Symmetry</b>	@ ½ VCC Level	40/60		60/40	40/60		60/40	%
<b>Rise and Fall Times</b>	20% VCC to 80% VCC			4			4	ns
<b>Jitter</b>	1.0 ~ 33.0 MHz		±100	±250		±100	±250	pS
	> 33.1 MHz		±50	±100		±50	±100	pS
<b>“0” Level</b>				0.4			0.4	VDC
<b>“1” Level</b>		2.7			VCC-0.5			VDC
<b>Load (HCMOS)</b>	1.0 ~ 50.0 MHz			30			50	pF
	> 50.1 MHz			15			15	pF
<b>Enable/Disable Time</b>				150			100	ns
<b>Start-up Time</b>				10			10	ms

\* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

## Part Numbering Guide: Example ECS-P83X-16.312-AN

ECS	-	Series	-	Frequency MHz	-	Stability	-	Temperature Range
ECS	-	P83X = +3.3V P85X = +5.0V	-	16.312 = 16.312 MHz	-	A = ±100 PPM B = ±50 PPM	-	Blank = 0 ~ +70°C N = -40 ~ +85°C

**Package Dimensions (mm)**



**Figure 1) Top, Side, and Bottom views**

ECS-P83X (3.3V) Tri-State Control Voltage	
Pin #1 = Open	#5 = Output
Pin #1 = +0.7V Min	#5 = Output
Pin #1 = +0.2V Max	#5 = High Impedance

ECS-P85X (5V) Tri-State Control Voltage	
Pin #1 = Open	#5 = Output
Pin #1 = +2.0V Min	#5 = Output
Pin #1 = +0.8V Max	#5 = High Impedance

Pin Connections	
#1	Tri-State
#4	Ground
#5	Output
#8	VCC