RoHS COMPLIANT

Obsolete/End of Life Date 5/15/2026

ECS-P143X/P145X

Programmable Clock Oscillator

The ECS-P143X (3.3V) and ECS-P145X (5V) 14 pin DIP is a programmable crystal controlled oscillator. The standard 14 pin DIP footprint is ideal for existing PC boards.

Request a Sample

ECS INC INTERNATIONAL®

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-P143X/P145X



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

Parameters	Conditions	ECS-P143X (+3.3V)			ECS-P145X (+5V)			Units
		MIN	TYP	MAX	MIN	TYP	MAX	
Frequency Range		1.000		125.000	1.000		150.000	MHz
Operating Temperature	Standard	0		+70	0		+70	°C
	Extended (N Option)	-40		+85	-40		+85	°C
Storage Temperature		-55		+125	-55		+125	°C
Frequency Stability*	Option A			±100			±100	PPM
	Option B			±50			±50	PPM
Input Voltage (VCC)		+2.97	+3.3	+3.63	+4.5	+5.0	+5.5	VDC
Input Current				28			45	mA
Output Symmetry	@ ½ VCC Level	40/60		60/40	40/60		60/40	%
Rise and Fall Times	20% VCC to 80% VCC			4			4	ns
Jitter	1.0 ~ 33.0 MHz		±100	±250		±100	±250	pS
	> 33.1 MHz		±50	±100		±50	±100	pS
"0" Level				0.4			0.4	VDC
"1" Level		2.7			VCC-0.5			VDC
Load HCMOS	1.0 ~ 50.0 MHz			30			50	pF
	> 50.1 MHz			15			15	pF
Enable/Disable Time				150			100	ns
Start-up Time				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-P143X-16.312-AN

ECS	-	Series	-	Frequency MHz	-	Stability	Temperature Range
ECS		P143X = +3.3V P145X = +5.0V		16.312 = 16.312 MHz		A =±100 PPM B = ±50 PPM	Blank = 0 ~ +70°C N = -40 ~ +85°C

Package Dimensions (mm)

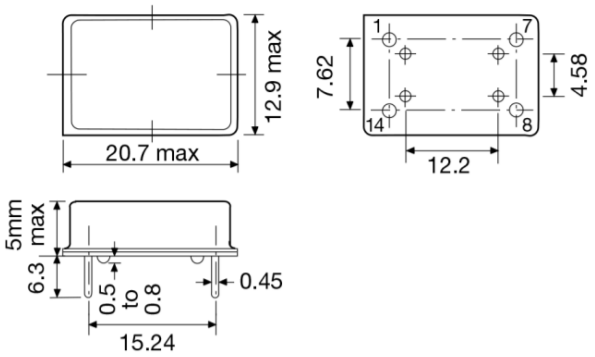


Figure 1) *Top, Side, and Bottom views*

Pin Connections	
#1	Tri-State
#7	Ground
#8	Output
#14	VCC

ECS-P83X (3.3V) Tri-State Control Voltage	
Pin #1 = Open	#8 = Output
Pin #1 = +0.7V Min	#8 = Output
Pin #1 = +0.2V Max	#8 = High Impedance

ECS-P85X (5V) Tri-State Control Voltage	
Pin #1 = Open	#8 = Output
Pin #1 = +2.0V Min	#8 = Output
Pin #1 = +0.8V Max	#8 = High Impedance