

ECS-P143/P145 SERIES PROGRAMMABLE CLOCK OSCILLATOR



The ECS-P143 (3.3V) and P145 (5V) 14 pin DIP, twice programmable crystal controlled oscillator. The standard 14 pin Dip footprint is ideal for existing PC boards.

Programmable (2 time)
3.3V & 5 V Options
PLL Technology
14 Pin Dip Footprint
Extended Temp Range

PART NUMBERING GUIDE "EXAMPLE"

	SERIES	FREQUENCY (MHz)	Stability	Temp Range (Optional)
ECS	- P143	- 16.312	- A	- N

Sample Part Number: ECS-P143-16.312-AN

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

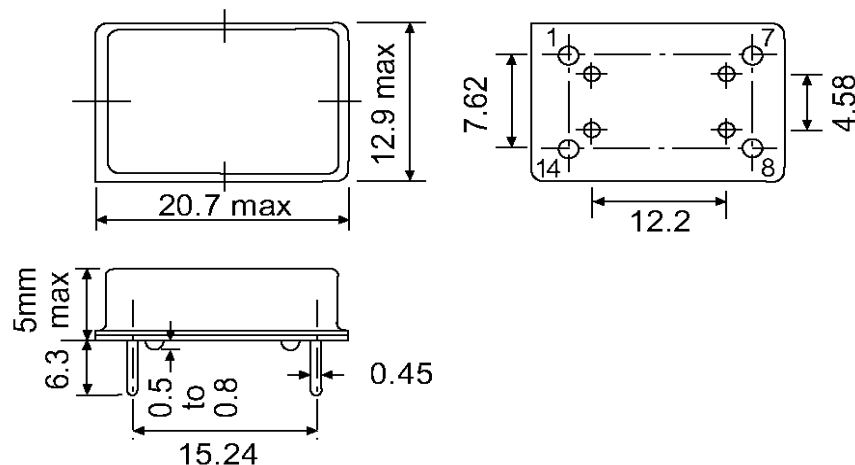
PARAMETERS	CONDITIONS	ECS-P143 (3.3V)			ECS-P145 (5V)			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
Frequency Range		1.000		125.000	1.000		150.000	MHz
Frequency Stability *	Option A			± 100			± 100	PPM
	Option B **			± 50			± 50	PPM
Operating Temperature	Standard	0		+70	0		+70	°C
	Extended (N Option)	-40		+85	-40		+85	°C
Storage Temperature		-55		+125	-55		+125	°C
Input Voltage (Vcc)		+2.97	+3.3	+3.63	+4.5	+5.0	+5.5	V DC
Input Current				28			45	mA
Output Symmetry	at 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 p-p
	> 33.1 MHz		± 50	± 100		± 50	± 100	pS p-p
"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

Rev 12/01

** Not available with extended temp range option.

PACKAGE DIMENSIONS (mm)



ECS-P143 (3.3V) Tri-State Control Voltage

Pin #1=Open	#3 = Output
Pin #1=+0.7V Min.	#3 = Output
Pin #1=+0.2V Max.	#3=High Impedance

ECS-P145 (5V) Tri-State Control Voltage

Pin #1=Open	#3 = Output
Pin #1=+2.0V Min.	#3 = Output
Pin #1=+0.8V Max.	#3=High Impedance

Pin Connections	
# 1	Tri-State
# 7	Gnd
# 8	Output
# 14	Vcc

Figure 1) Top, Side and Bottom Views