ECS-100X Series

Clock Oscillator

The ECS-100X clock oscillator is fully compatible with TTL circuitry. The metal package with pin #7 case ground acts as shielding to minimize radiation.

Request a Sample

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-100X

- 10 TTL output load
- Low cost
- Wide frequency range
- Industry standard footprint
- Resistance weld package
- PbFree/RoHS Compliant

Parameters	Frequency Range	Conditions	MIN	TYP	MAX	Units
Frequency (F_O)	1.000 ~ 150.000		1.000		150.000	MHz
Operating Temperature Range (T_{OPR})	1.000 ~ 150.000		0		+70	°C
Storage Temperature Range (T_{STG})	1.000 ~ 150.000		-55		+125	°C
Frequency Stability	1.000 ~ 150.000	All Conditions*	-100		+100	PPM
Input Current (I_{DD})	1.000 ~ 7.999	Max. load			15	mA
	8.000 ~ 23.999	Max. load			30	mA
	24.000 ~ 69.999	Max. load			70	mA
	70.000 ~ 150.000	Max. load			80	mA
Output Symmetry	1.000 ~ 7.999	1.4V level	45	50 ± 3	55	%
	8.000 ~ 150.000	1.4V level	40	50 ± 3	60	%
Rise Time (T_R)	1.000 ~ 24.999	0.4V ~2.4V			10	nS
	25.000 ~ 69.999	0.5V ~ 2.4V			5	nS
	70.000 ~ 150.000	0.5V ~ 2.4V			4	nS
Fall Time (T_F)	1.000 ~ 24.999	2.4V ~ 0.4V			10	nS
	25.000 ~ 69.999	2.4V ~ 0.5V			5	nS
	70.000 ~ 150.000	2.4V ~ 0.5V			4	nS
Output Voltage (V_{OL})	1.000 ~ 24.999	IOL = 20 mA			0.4	V
Output Voltage (V_{OL})	25.000 ~ 69.999	IOL = 20 mA			0.5	V
Output Voltage (V_{OH})	70.000 ~ 150.000	IOH = 1 mA	2.4			V
Output Current (I_{OL})	1.000 ~ 150.000	VOL = 0.5V			20	mA
Output Current (I_{OH})	1.000 ~ 150.000	VOH = 2.4V			1.0	mA
Output Load	1.000 ~ 150.000				10	TTL
Start-Up Time (T_S)	1.000 ~ 3.499				20	mS
	3.500 ~ 3.999				35	mS
	4.000 ~ 5.999				30	mS
	6.000 ~ 19.999				20	mS
	20.000 ~ 150.000				15	mS
Supply Voltage	1.000 ~ 150.000		+4.75	+5.0	+5.25	VDC

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

Part Numbering Guide: Example ECS-100AX-100

ECS	-	Series	-	Stability	-	Frequency Abbreviations
ECS		100 +5V TTL Full Size		AX = ±100 PPM BX = ±50 PPM CX = ±25 PPM		100 = 10.000 MHz

ECS-100X Series

Clock Oscillator

Package Dimensions (mm)

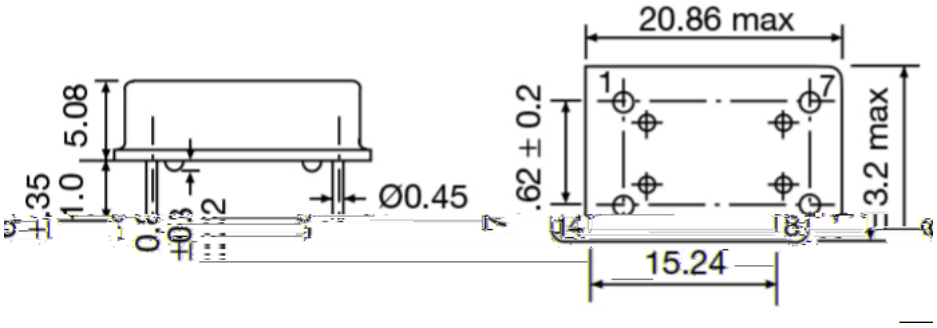

Figure 1) *Side and Bottom views*

Pin Connections	
#1	NC
#7	Case GND
#8	Output
#14	+5 V DC

Figure 3) *Pin Connections*

Figure 2) *Output Wave Form*