

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.

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OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS



- 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
	(V _{OL}) 25.000 ~ 69.999	IOL = 20 mA			0.5	V
	(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
	(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

Package Dimensions (mm)

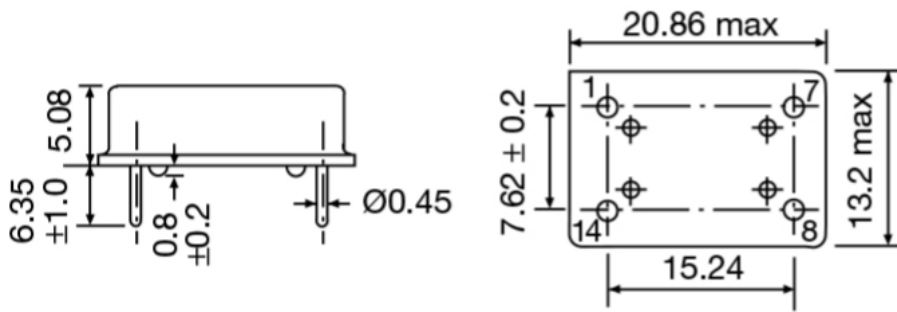


Figure 1) Side and Bottom views

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

Figure 3) Pin Connections

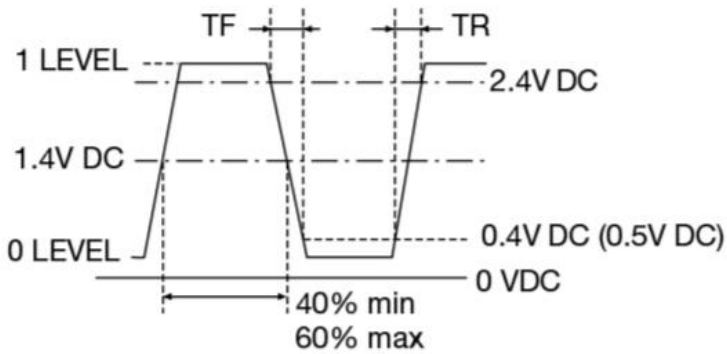


Figure 2) Output Wave Form

Mouser Electronics

Authorized Distributor

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ECS:

[ECS-100AX-1.2288MHZ](#) [ECS-100AX-110.5](#) [ECS-100AX-1.2288](#) [ECS-100AX-9.216](#) [ECS-100AX-2.0](#) [ECS-100AX-4.9152](#) [ECS-100AX-24.0](#) [ECS-100AX-12.0](#) [ECS-100AX-40.0](#) [ECS-100AX-16.0](#) [ECS-100AX-1.8432](#) [ECS-100AX-27.0](#) [ECS-100AX-25.0](#) [ECS-100AX-30.0](#) [ECS-100AX-18.0](#) [ECS-100AX-48.0](#) [ECS-100AX-9.8304](#) [ECS-100AX-6.0](#) [ECS-100AX-3.579545](#) [ECS-100AX-14.7456](#) [ECS-100AX-16.257](#) [ECS-100AX-2.4576](#) [ECS-100AX-10.0](#) [ECS-100AX-35.0](#) [ECS-100AX-11.0592](#) [ECS-100AX-7.3728](#) [ECS-100AX-5.0](#) [ECS-100AX-6.144](#) [ECS-100AX-010](#) [ECS-100AX-19.6608](#) [ECS-100AX-64.0](#) [ECS-100AX-8.0](#) [ECS-100AX-4.0](#) [ECS-100AX-50.0](#) [ECS-100AX-14.31818](#) [ECS-100AX-66.6666](#) [ECS-100AX-28.322](#) [ECS-100AX-18.432](#) [ECS-100AX-25.175](#) [ECS-100AX-32.0](#) [ECS-100AX-3.6864](#) [ECS-100AX-20.0](#) [ECS-100AX-5.0688](#) [ECS-100AX-020](#) [ECS-100AX-500](#) [ECS-100AX-035](#) [ECS-100AX-036](#) [ECS-100AX-040](#) [ECS-100AX-060](#) [ECS-100AX-061](#) [ECS-100AX-073](#) [ECS-100AX-240](#) [ECS-100AX-270](#) [ECS-100AX-350](#) [ECS-100AX-049](#) [ECS-100AX-050](#) [ECS-100AX-051](#) [ECS-100AX-092.1](#) [ECS-100AX-162.5](#) [ECS-100AX-180](#) [ECS-100AX-400](#) [ECS-100AX-480](#) [ECS-100AX-640](#) [ECS-100AX-012.2](#) [ECS-100AX-018](#) [ECS-100AX-024](#) [ECS-100AX-184](#) [ECS-100AX-196.6](#) [ECS-100AX-200](#) [ECS-100AX-250](#) [ECS-100AX-300](#) [ECS-100AX-320](#) [ECS-100AX-080](#) [ECS-100AX-098.3](#) [ECS-100AX-100](#) [ECS-100AX-143](#) [ECS-100AX-147.4](#) [ECS-100AX-160](#)