

The ECS-2100X Series clock oscillator offers low current drain and is compatible with HCMOS/TTL logic. The metal package with pin #4 case ground acts as a shielding to minimize radiation.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

ECS-2100X



- HCMOS/TTL logic compatible
- Wide frequency range
- Low power consumption
- Resistance weld package
- 3.3V operation (optional)
- 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 ~ 25.000			17	25	mA
	25.000 ~ 50.000			33	46	mA
	50.000 ~ 80.000			45	77	mA
	80.000 ~ 150.000			67	82	mA
Output Symmetry	1.000 ~ 80.000	50% V _{DD} level	45	50 ± 3	55	%
	80.000 ~ 150.000	50% V _{DD} level	40	50 ± 3	60	%
Rise Time (T _R)	1.000 ~ 150.000	10% ~ 90% V _{DD} level			5	nS
Fall Time (T _F)	1.000 ~ 150.000	90% ~ 10% V _{DD} level			5	nS
Output Voltage (V _{OL}) (V _{OH})	1.000 ~ 150.000	I _{OL} = 16 mA			0.5	V
	1.000 ~ 150.000	I _{OH} = -16 mA	4.5			V
Output Current (I _{OL}) (I _{OH})	1.000 ~ 150.000	V _{OL} = 0.5V			16	mA
	1.000 ~ 150.000	V _{OH} = 4.5V			-16	mA
Output Load	1.000 ~ 150.000	TTL			10	TTL
	1.000 ~ 80.000	HCMOS			50	pF
	80.000 ~ 150.000	HCMOS			30	pF
Start-Up Time (T _S)	1.000 ~ 150.000	0.0V to 5.0V			10	mS
Supply Voltage (V _{DC})			+4.75	+5.0	+5.25	V _{DC}

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

Part Numbering Guide: Example ECS-2100AX-100

ECS - Series - Stability - Frequency Abbreviations

ECS

2100
+5V HCMOS/TTL
Half Size

AX = ±100 PPM
BX = ±50 PPM
CX = ±25 PPM

100 = 10.000 MHz

Package Dimensions (mm)

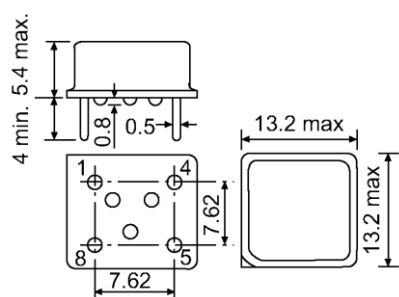


Figure 1) Side, Bottom, and Top views

Pin Connections	
#1	NC
#4	GROUND
#5	Output
#8	+5V DC

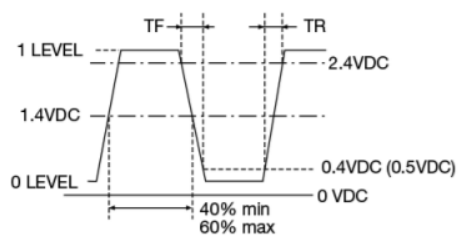


Figure 2) TTL Output Wave Form

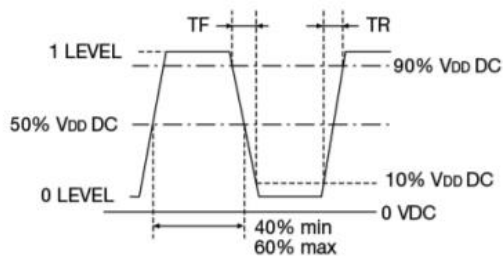


Figure 3) HCMOS Output Wave Form