RoHS COMPLIANT

Not Recommended for New Designs

ECS-400X Series

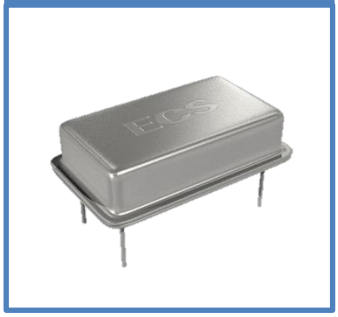
Clock Oscillator

Request a Sample

ECS INC INTERNATIONAL®

The ECS-400X Series clock oscillator offers low current drain and is compatible with HCMOS/TTL logic. The metal package with pin #7 case ground acts as shielding to minimize radiation.

ECS-400X



- HCMOS/TTL logic compatible
- Wide frequency range
- Low power consumption
- Resistance weld package
- PbFree/RoHS Compliant

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

Parameters	Frequency Range	Conditions	MIN	TYP	MAX	Units
Frequency (F_O)	0.250 ~ 150.000		0.250		150.000	MHz
Operating Temperature Range (T_{OPR})	0.250 ~ 150.000		0		+70	ºC
Storage Temperature Range (T_{STG})	0.250 ~ 150.000		-55		+125	ºC
Frequency Stability	0.250 ~ 150.000	All Conditions*	-100		+100	PPM
Input Current (I_{DD})	0.250 ~ 20.000				12	mA
	20.000 ~ 25.000				15	mA
	25.000 ~ 150.000				30	mA
Output Symmetry		50% V_{DD} level	40	50 ± 3	60	%
Rise Time (T_R)	0.250 ~ 25.000	10% ~ 90% V_{DD} level			10	nS
	25.000 ~ 150.000	10% ~ 90% V_{DD} level			5	nS
Fall Time (T_F)	0.250 ~ 25.000	90% ~ 10% V_{DD} level			10	nS
	25.000 ~ 150.000	90% ~ 10% V_{DD} level			5	nS
Output Voltage (V_{OL})	0.250 ~ 150.000	I_{OL} = 4 mA			0.5	V
Output Voltage (V_{OH})	0.250 ~ 150.000	I_{OH} = -4 mA	4.5			V
Output Current (I_{OL})	0.250 ~ 150.000	V_{OL} = 0.5V			4	mA
Output Current (I_{OH})	0.250 ~ 150.000	V_{OH} = 4.5V			-4	mA
Output Load	0.250 ~ 150.000	TTL			10	TTL
	0.250 ~ 150.000	HCMOS			15	pF
Start-Up Time (T_S)	0.250 ~ 25.000				5	mS
	25.000 ~ 150.000				10	mS
Supply Voltage			+4.75	+5.0	+5.25	V

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

Part Numbering Guide: Example ECS-400AX-100

ECS -	Series -	Stability -	Frequency Abbreviations
ECS	400 +5V HCMOS/TTL Full Size	AX = ±100 PPM BX = ±50 PPM CX = ±25 PPM	100 = 10.000 MHz

Package Dimensions (mm)

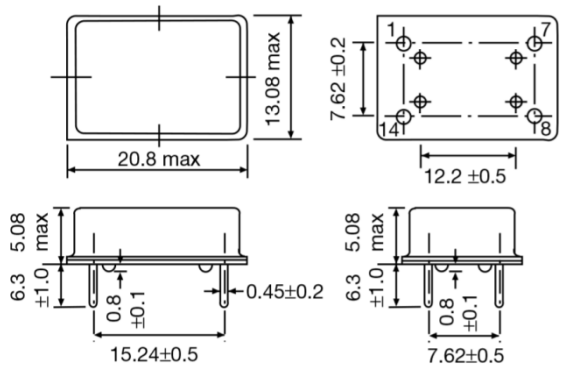


Figure 1) *Top, Side and Bottom views*

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

Figure 3) *Pin Connections*

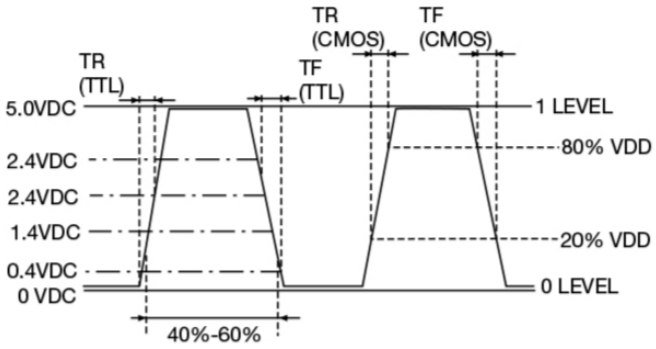


Figure 2) *Output Wave Form*