

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

FEATURES

- 10 TTL output load
- Low cost
- Wide frequency range
- Industry standard footprint
- Resistance weld package
- 3.3V operation (optional)

PART NUMBERING GUIDE

PART NUMBER *	FREQUENCY STABILITY
ECS-100A	±100 PPM
ECS-100B	±50 PPM
ECS-100C	±25 PPM

* Complete part number to include frequency. i.e. ECS-100A-100 (100 = 10.000MHz)

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE (f ₀)	1.000 ~ 150.000		1.000		150.000	MHz
OPERATING TEMP. RANGE (T _{OPR})	1.000 ~ 150.000		0		+70	°C
STORAGE TEMP. 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	I _{OL} = 20 mA		0.4	V
	(V _{OL})	25.000 ~ 150.000	I _{OL} = 20 mA		0.5	V
	(V _{OH})	70.000 ~ 150.000	I _{OH} = 1 mA	2.4		V
OUTPUT CURRENT	(I _{OL})	1.000 ~ 150.000	V _{OL} = 0.5 V		20	mA
	(I _{OH})	1.000 ~ 150.000	V _{OH} = 2.4 V		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	+5.0 ±0.25			-	V _{DC}

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

PACKAGE DIMENSIONS (mm)

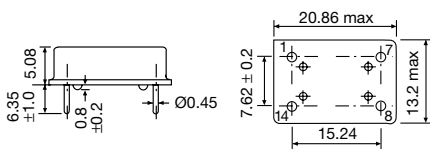


Figure 1) ECS-100 Series Side and Bottom views



Figure 2) Output Wave Form

PIN CONNECTIONS	
#1	NC
#7	CASE GND
#8	OUTPUT
#14	+5 V DC

Figure 3) Pin Connections

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ECS:

[ECS-100A-14.7456](#) [ECS-100A-32.514](#) [ECS-100A-8.0](#) [ECS-100A-25.0](#) [ECS-100A-2.0](#) [ECS-100A-50.0](#) [ECS-100A-36.864](#) [ECS-100A-25.175](#) [ECS-100A-10.0](#) [ECS-100A-20.0](#) [ECS-100A-18.0](#) [ECS-100A-5.0](#) [ECS-100A-6.144](#) [ECS-100A-1.0](#) [ECS-100A-40.0](#) [ECS-100A-28.322](#) [ECS-100A-110.5](#) [ECS-100A-120](#) [ECS-100A-060](#) [ECS-100A-080](#) [ECS-100A-020](#) [ECS-100A-010](#) [ECS-100A-040](#) [ECS-100A-320](#) [ECS-100A-098.3](#) [ECS-100A-018](#) [ECS-100A-240](#) [ECS-100A-251.7](#) [ECS-100A-480](#) [ECS-100A-143](#) [ECS-100A-073](#) [ECS-100A-147.4](#) [ECS-100A-196.6](#) [ECS-100A-184](#) [ECS-100A-050](#) [ECS-100A-049](#) [ECS-100A-160](#) [ECS-100A-200](#) [ECS-100A-250](#) [ECS-100A-400](#) [ECS-100A-500](#) [ECS-100A-100](#) [ECS-100A-300](#) [ECS-100A-061](#) [ECS-100A-640](#) [ECS-100A-036](#) [ECS-100A-051](#) [ECS-100A-012.2](#) [ECS-100A-035](#) [ECS-100A-283.2](#) [ECS-100A-325.1](#) [ECS-100A-350](#) [ECS-100A-666](#) [ECS-100A-162.5](#) [ECS-100A-180](#) [ECS-100A-024](#) [ECS-100A-092.1](#)