

ELECTRICAL SPECIFICATIONS (TA = 25°C, VDD = 3.3V, CL = 15pF)

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	TYP	MAX	UNITS
Frequency Stability	1.800 ~ 67.000	All Conditions* Vdd = 5.0V	-100 -150		+100 +150	PPM
Input Current (I _{dd})	1.800 ~ 32.000 32.000+ ~ 50.000 50.000+ ~ 67.000				10 15 25	mA
Output Symmetry	1.800 ~ 50.000 50.000+ ~ 67.000	50% Vdd Level	45 40		55 60	%
Rise Time (T _r)	1.800 ~ 67.00	10% ~ 90% Vdd Level		2.0	7	nS
Fall Time (T _f)		90% ~ 10% Vdd Level		2.0	7	nS
Output Voltage (V _{OL}) (V _{OH})	1.800 ~ 67.000	I _{OL} = 2mA I _{OH} = -2mA	90% Vdd		10% Vdd	V
Output Current (I _{OL}) (I _{OH})	1.800 ~ 67.000	V _{OL} = 0.33V V _{OH} = 2.97V			2 -2	mA
Output Load	1.800 ~ 67.000	HCMOS			15	pF
Standby Current	1.800 ~ 67.000	V _{IL} ≤ 3.0V		1.4	10	μA
Output Enable Time	1.800 ~ 67.000	See Table**			10	mS
Output Disable Time	1.800 ~ 67.000	See Table**			150	nS
Start-up Time (T _s)	1.800 ~ 32.000 32.000+ ~ 67.000			0.5	5 10	mS

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

** An internal pullup resistor from pin 1 to pin 14 allows active output if pin 1 is left open.

OPERATING CONDITIONS

Frequency Range (Fo)	1.800 ~ 67.000 MHz
Operating Temperature Range (TOPR)	-10 ~ +70°C
Storage Temperature Range (TSTG)	-55 ~ +125°C
Supply Voltage (Vdd)	3.3±10%, 5.0±10% V

±50 ppm frequency stability available upon request.

ENABLE/DISABLE FUNCTION**

INH (Pin 1)	OUTPUT (Pin 3)
OPEN **	ACTIVE
"1" Level V _{IH} ≥ .07V	ACTIVE
"0" Level V _{IL} ≤ 0.3V	High Z



ECS-3951

ECS's 3951 is our dual voltage oscillator with voltages of 3.3 Volts and 5.0 Volts. This part can be utilized in mixed voltage designs and low power applications, ensuring that future revisions won't require oscillator changes. Among the many benefits of the 3.3 Volt oscillator are an increase in battery life, reduced heat generation and improved EMI, packaged with the lower profile necessary for today's advanced portable PC and instrumentation designs.

FEATURES

- 1.800 ~ 32MHz 3.3V/5.0V Operation (above 32MHz customer select 3.3V or 5.0V)
- Miniature Profile
- Lower Power Consumption
- Standby Function
- Tape & Reel (2,000 pcs. STD)

DIMENSIONS (MM)

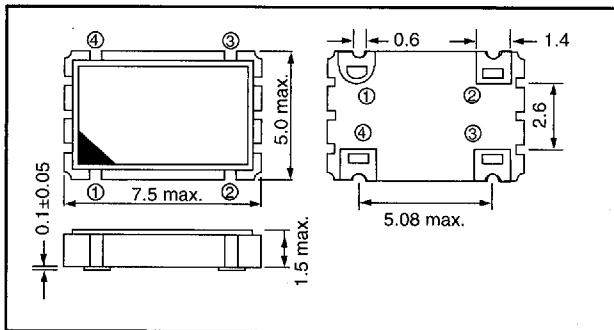


Fig 1) Dimensions

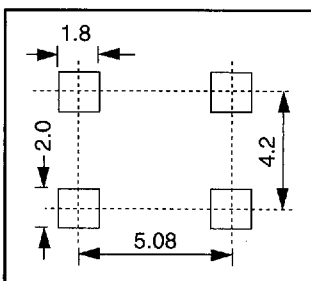


Fig 3) Land Pattern

PIN CONNECTIONS	
#1	E/D**
#2	GND
#3	Output
#4	3.3V/5.0VDC

Fig 2) Pin Connections