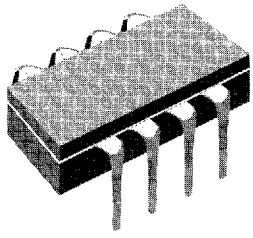

ECS-300

Owing to its conformance to 8-pin DIP packaging, this oscillator requires low current consumption and a wide supply voltage of 3V-6V. Startup time of less than 1.5msec and a stand-by function make this oscillator suitable for all applications. This oscillator is available with ±100ppm tolerance over a temperature range of -10~ +70°C.

The housing for this crystal is made from the same thermo plastic material that is standard for integrated circuits.

SPECIFICATIONS

Standard Frequency MHz (25 fundamental oscillation wave length) for Dual Output CMOS Clock Oscillators								
fo (Fund. frequency)	fo/2ⁿ (Dividing frequency)							
1/2⁰	1/2¹	1/2²	1/2³	1/2⁴	1/2⁵	1/2⁶	1/2⁷	1/2⁸
12 MHz	6 MHz	3 MHz	1.5 MHz	750 kHz	375 kHz	187.5 kHz	93.75 kHz	46.875 kHz
12.288	6.144	3.072	1.536	768	384	192	96	48
12.8	6.4	3.2	1.6	800	400	200	100	50
14.31818	7.15909	3.579545	1.789722	894.88	447.44	223.72	111.860	55.930
14.7456	7.3728	3.68764	1.8432	921.6	460.8	230.4	115.02	57.6
15.9744	7.9872	3.9936	1.9968	998.4	499.2	249.6	124.8	62.4
16	8	4	2	1000	500	250	125	62.5
16.384	8.192	4.096	2.048	1024	512	256	128	64
17.734476	8.867238	4.433619	2.216809	1108.4	554.2	277.1	138.55	69.275
18.432	9.216	4.608	2.304	1152	576	288	144	72
19.6608	9.8304	4.9152	2.4576	1228.8	614.4	307.2	153.6	76.8
20	10	5	2.5	1250	625	312.5	156.25	78.125
24	12	6	3	1500	750	375	187.5	93.75

ELECTRICAL PARAMETERS AND DIMENSIONS (MM)

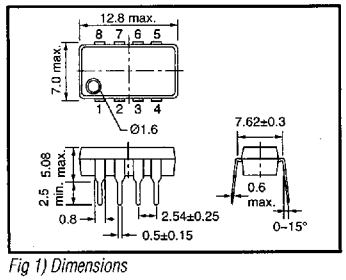

Fig 1) Dimensions

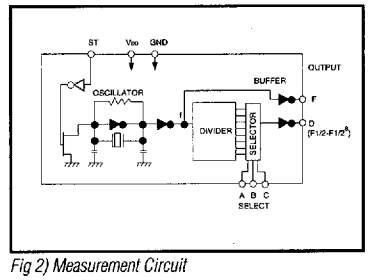

Fig 2) Measurement Circuit

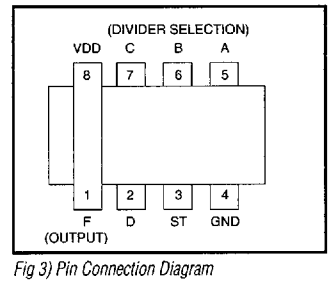

Fig 3) Pin Connection Diagram

Input				Output	
Select			ST	F	D
C	B	A		(Original Freq.)	(Divided Waveform)
x	x	x	L	L	L
L	L	L	H	fo clock	fo 2 clock
L	L	H	H	fo clock	fo 1/2² clock
L	H	L	H	fo clock	fo 1/2³ clock
L	H	H	H	fo clock	fo 1/2⁴ clock
H	L	L	H	fo clock	fo 1/2⁵ clock
H	L	H	H	fo clock	fo 1/2⁶ clock
H	H	L	H	fo clock	fo 1/2⁷ clock
H	H	H	H	fo clock	fo 1/2⁸ clock

Fig 4) Setting of Dividing Output

Pin Connection	
1	Output
2	Dividing Ratio
3	Standby
4	GND
5	A (Programming)
6	B (Programming)
7	C (Programming)
8	Vdd (5V)

Fig 5) Pin Connection

NOTE:

Current Consumption ±1 miliamp max.
Supply Current 20miliamps max at 25°C.
Rise and Fall Time 10 nsec typ./15nsec max.
Delay between buffered output and divided output is non existant because frequencies are generated by separate output pins.

Storage Temperature -55° ~ +125°C.
Symmetry 50±10%.
Input Current 35mA max.
Output Load 15 pf or LS-TTL1.
Start Up 1.5 msec.
Frequency Stability ±100 ppm.