



Crystal Clock Oscillator (OSC-H, OSC-F Series) Crystal Clock Oscillator Part Numbering System

OSC Series : Half Size (8Pin) , Full Size (14Pin)

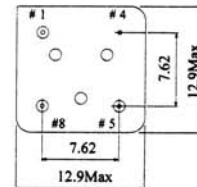
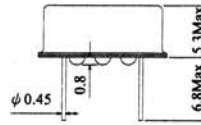
20.000KHz - 160.000MHz

● SPECIFICATION

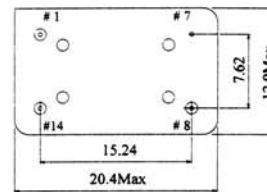
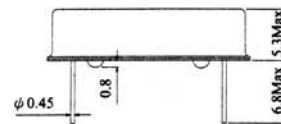
Frequency Range	20K-150MHz
Input Voltage (V _{DD})	3.3V , 5V
Frequency Stability	±25, ±50, ±100PPM
Operating Temperature	-10°C ~ +70°C -40°C ~ +85°C Available
Storage Temperature	-55°C ~ +125°C
Output Voltage	CMOS : V _{OH} =90%V _{DDmin} , V _{OL} =10%V _{DDmin} TTL : V _{OH} =2.4V _{min} , V _{OL} =0.4V _{min}
Symmetry	40~60% typical, 45~55% Available
Output Load	10 TTL/15pF or 30pF
Star-up Time	10mSec.max(5mSec. Typical)
Rise/Fall Time	10nSec.max(5mSec. Typical)
Current Consumption	15~45mA max
Aging	±5PPM/year
Enable / Disable of Pin1	Enable: NC or High Disable: Low

● DIMENSIONS(mm)

Half Size (8Pin)

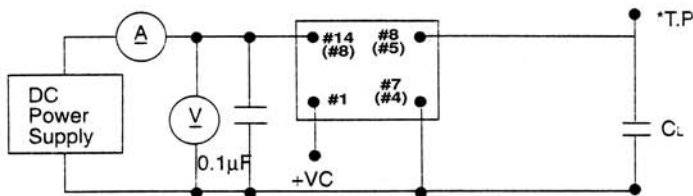


Full Size (14Pin)



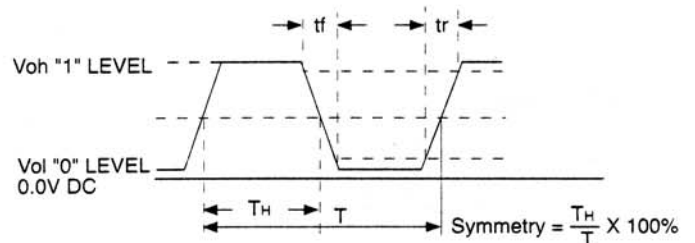
Pin	Connetion
#1	N.C. or Tri-State
#4(#7)	GND
#5(#8)	Output
#8(#14)	+V _{DD}

● TEST CIRCUIT



C_L = 15pF (including fixture and probe capacitances)

● OUTPUT WAVEFORM



Crystal Clock Oscillator Part Numbering System

• Package : OSC-S21 , OSC-S22 , OSC-S3 , OSC-S5 , OSC-S7 , OSCLD, OSCLP, OSC RTC, OSC-H , OSC-F

OSC	Output Type	Frequency in M/KHz	M K	Input Voltage (V _{DD})	Operation Temp.	Package Code	Stability	Output Symmetry	Custom Speci.
	Blank : Standard CMOS		M: MHz	Blank : +5V	1: -10 ~ +60°C	H: Half	-10 : ± 10PPM	Blank : 40/60%	*
	LE : Low EMI		K: KHz	-3.3 : +3.3V	Blank : -10 ~ +70°C	F: Full	-15 : ± 15PPM	T : 45/55%	
	LD : LVDS			-2.8 : +2.8V	2: -20 ~ +70°C	S7 : 7*5 SMD	-20 : ± 20PPM	X : Custom	
	LP : LVPECL			-2.5 : +2.5V	28: -20 ~ +85°C	S5 : 5*3.2 SMD	-25 : ± 25PPM		
				-1.8 : +1.8V	3: -30 ~ +75°C	S3 : 3.2*2.5 SMD	-30 : ± 30PPM		
					38: -30 ~ +85°C	S22 : 2.5*2.0 SMD	Blank : ± 50PPM		
					1: -40 ~ +85°C	S21 : 2.0*1.6 SMD	-100 : ± 100PPM		
					A: -40 ~ +105°C		-150 : ± 150PPM		
					B: -40 ~ +125°C		:		
					C: -55 ~ +125°C		:		
					X: Custom				