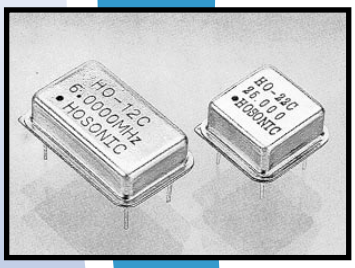






HCMOS/TTL CRYSTAL OSCILLATOR SERIES HO-12/HO-22



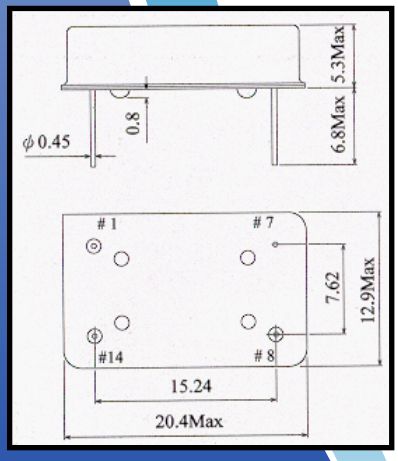
DESCRIPTION

VTM offer a very competitively priced range of full size (HO- 12) and half size (HO- 22) HCMOS / TTL Crystal oscillators. They are housed in a resistance welded case. The frequency range available is 1.000 to 100MHz. Output symmetry is 40 to 60% standard, although 45 to 55% is available. Likewise the standard operating temperature range is 0° C to 70° C, although an extended range of -40° C to +85° C can be manufactured.

SPECIFICATIONS

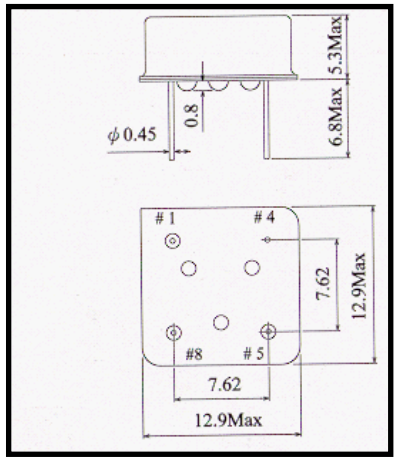
Model		HO- 12 Series	HO- 22 Series
Package		14 Pin DIP (Full Size)	8 Pin DIP (Half Size)
Frequency Range	(Fo)	1.000MHz to 100.000 MHZ	
Frequency Stability	($\Delta f / f_o$)	A = ± 25 ppm, B = ± 50 ppm, C = ± 100 ppm	
Operating Temperature Range	(T_{OPR})	0°C to +70°C, -40°C to +85°C (available)	
Storage Temperature	(T_{STG})	-55°C to +125°C	
Power Supply Voltage	(V_{DD})	5V ± 0.5 V DC	
Ageing (at 25°C)		± 5 ppm / year Max.	
Supply Current	(I_{DD})	1.000 MHz to 23.999 MHz 20mA Max. 24.000 MHz to 49.999 MHz 30mA Max. 50.000 MHz to 69.999 MHz 40mA Max 70.000 MHz to 100.000 MHz 60mA Max	
Output symmetry (at 50% V_{DD})		40 to 60 % Normal, 45 to 55% Available	
Rise and Fall Time 10% to 90% of Waveform W/H_{CMOS} Load	(T_R ,T_F)	5 ns Max.	
Output Voltage Logic High	(V_{OH})	4.5 V Min.	
Output Voltage Logic Low	(V_{OL})	0.5 V Max.	
Output Load	1.000MHz to 39.999 MHz	10 TTL Load or 50 pF HCMOS Load	
	40.000 MHz to 100.000 MHZ	10 TTL Load or 15 pF HCMOS Load	

DIMENSIONS (mm)



Pin	Connection
#1	N.C.
#7	GND
#8	Output
#14	+5VDC

HO-12



Pin	Connection
#1	N.C.
#4	GND
#5	Output
#8	+5VDC

HO-22

ORDERING DATA

Specify model, frequency stability (ppm), frequency (in MHz), and temperature range

E.g HO- 12 C – 10.000 – S (blank for 0°C to + 70°C; S for -40°C to +85°C)