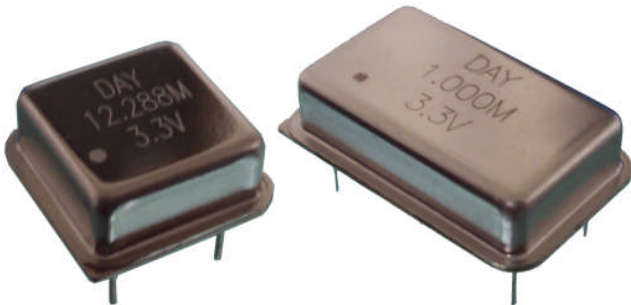


Crystal Oscillator Series		Features	
DIP08	DIP14		
		◆RoHS Compliant	◆HCMOS/TTL compatible

Electrical Specifications

Item		Specifications	
Type		DIP08/DIP14 3.3V	DIP08/DIP14 5.0V
Nominal Frequency Range		0.500MHz to 268.000MHz	
Frequency Stability		±20ppm(Standard) at 25°C±3°C, ±5ppm to ±100ppm available	
Operating Temperature		-20°C to +70°C(Standard), -40°C to +85°C available	
Storage Temperature		-55°C to +125°C	
Supply Voltage		3.3V±10%	5.0V±10%
Supply Current	0.5 to 29.99MHz	10mA Max.	0.5 to 16.99MHz 10mA Max.
	30.0 to 59.99MHz	15mA Max.	17.0 to 59.99MHz 25mA Max.
	60.0 to 89.99MHz	20mA Max.	60.0 to 89.99MHz 40mA Max.
	90.0 to 125.0MHz	30mA Max.	90.0 to 125.0MHz 60mA Max.
	125.0 to 268.0MHz	70mA Max.	125.0 to 268.0MHz 80mA Max.
Output	Rise & Fall Time	6ns: 0.5 to 49.99MHz 5ns: 50.0 to 79.99MHz 4ns: 80.0 to 99.99MHz 3ns: 100.0 to 124.99MHz 2ns: 125.0 to 268.0MHz	
	Load	30pF: 1.0 to 49.99MHz 15pF: 0.5 to 268.0MHz	50pF Max.
	Current Max.	4mA	16mA
	Low Level	0.5V Max.	
	High Level	V _{DC} -0.5V Min.	
Symmetry at 1/2 V _{DC}		45/55% typical, 40/60% available	
Start Up Time		<10ns	
Aging		±2ppm/year	

Stability vs. Temperature

◆ Standard		2	3	5	0	6	7	Remarks
◇ Please specify		±20ppm	±30ppm	±50ppm	±100ppm	±5ppm	±10ppm	
C	-20°C to +70°C	◆	◇	◇	◇	◇	◇	Standard
D	-40°C to +85°C	◇	◇	◆	◇	◇	◇	

Crystal Oscillator Series

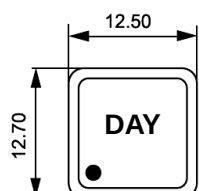
DIP08

DIP14

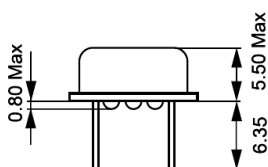
Ordering Information

Q	O	Type	Pin	XX.XXXX XXX.XXX	M	Output Logic	Supply Voltage	Stability Vs.Temp.	Operating Temp.	Symmetry At 1/2 V _{DC}	Option
Q: Quartz O: Oscillator	08D: DIP08 14D: DIP14	Blank: 4Pins	Center frequency 0.5 to 268.0MHz	M: MHz	T: Tri-state B: No Tri-State	A: 3.3V B: 5.0V	See Table	See Table	1: 45/55% 2: 40/60%	F: Lead Free T: T&R Blank: Bulk	
Example: QO14D32.768MBA2C2F (Oscillator, DIP14, 32.768MHz, No tri-state, 3.3V, +/-20ppm, -20 to +70deg., 40/60%, Bulk, Lead free)											

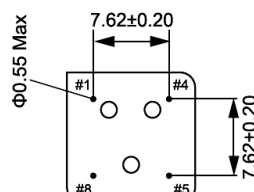
Dimensions DIP08



TOP VIEW



SIDE VIEW

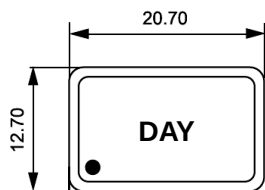


BOTTOM VIEW

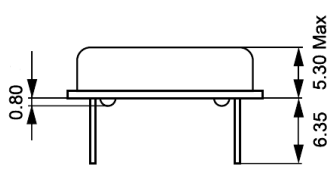
Pin	Connection
#1	Not connected or E/D
#4	GND
#5	OUTPUT
#8	V _{DC}

Unit:mm

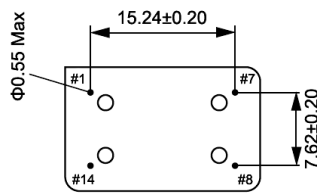
Dimensions DIP14



TOP VIEW



SIDE VIEW



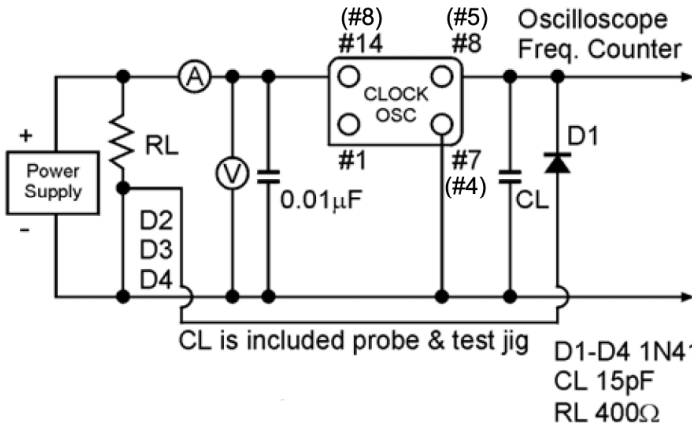
BOTTOM VIEW

Pin	Connection
#1	Not connected or E/D
#7	GND
#8	OUTPUT
#14	V _{DC}

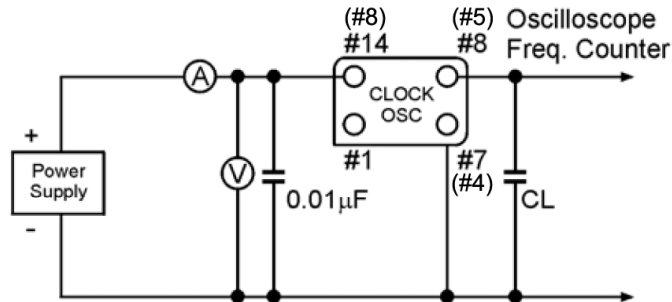
Unit:mm

Test Circuit

FOR TTL COMPATIBLE



FOR HCMOS COMPATIBLE



Crystal Oscillator Series

DIP08

DIP14

Reflow Soldering Profile

