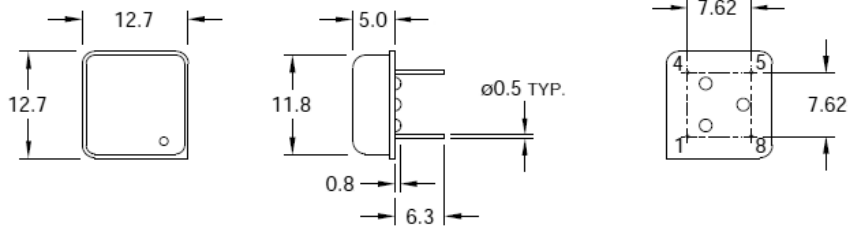
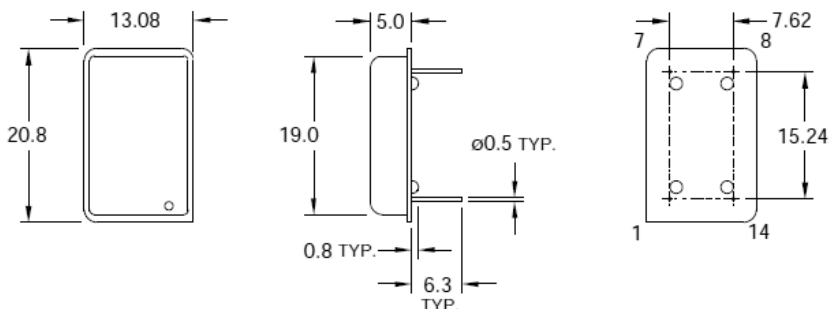


### DIP 8



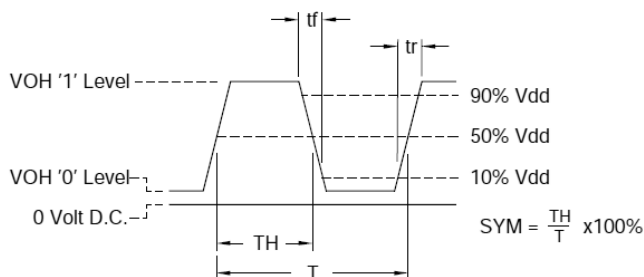
PIN CONNECTIONS	
#1	NO CONNECTION ENABLE/DISABLE
#4	GROUND
#5	OUTPUT
#8	SUPPLY VOLTAGE

### DIP 14

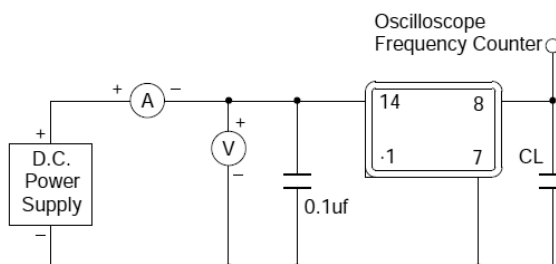
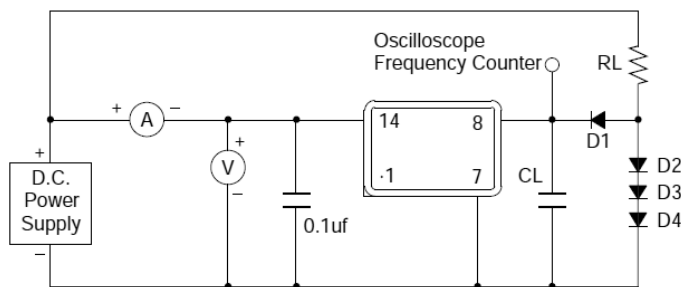


PIN CONNECTIONS	
#1	NO CONNECTION ENABLE/DISABLE
#7	GROUND
#8	OUTPUT
#14	SUPPLY VOLTAGE

### Output Waveform:



### Test Circuits:



See Specifications and Part Numbering on next page

**Note:** The above specifications are typical only. Please contact our Sales Department for specific requirements.



### SPECIFICATIONS

Series Number	DIP 8		/		DIP 14	
Frequency Range	750 KHz ~ 50 MHz		27.3 KHz ~ 160 MHz		27.3 KHz ~ 100 MHz	
Overall Frequency Stability (Max) <sup>(Note 1)</sup> <small>(see part number formatting below)</small>	A = ±25ppm B = ±50ppm C = ±100ppm D = ±10ppm		0° to 70° 0° to 70° 0° to 70° 0° to 70°		E = ±25ppm F = ±50ppm G = ±100ppm H = ±20ppm	
Supply Voltage (V <sub>DD</sub> )	+1.0V ±5%	+1.2V ±5%	+1.8V ±5%	+2.5V ±5%	+3.3V ±5%	+5.0V ±5%
Part Number Code: <small>(see part number formatting below)</small>	K/L	I/J	G/H	E/F	C/D	A/B
Output Voltage Level (Min) Level (Max)	"High", "1" "Low", "0"	0.9V 0.1V	1.08V 0.12V	1.62V 0.18V	2.25V 0.25V	2.97V 0.33V
Supply Current (Max)	25 MHz 4mA 50 MHz 5mA — —	25 MHz 5mA 50 MHz 8mA 100 MHz 10mA 160 MHz 15mA	25 MHz 5mA 50 MHz 10mA 100 MHz 15mA 160 MHz 20mA	25 MHz 5mA 50 MHz 12mA 100 MHz 30mA 160 MHz 35mA	25 MHz 5mA 50 MHz 15mA 100 MHz 40mA —	25 MHz 5mA 50 MHz 15mA 100 MHz 40mA —
Disable Current	10µA (Max) at OE ≤0.3V					
Output Load (Max)	15pF ; 30pF load for frequencies up to 70 MHz. Contact Hy-Q for 50pF load.					
Rise/Fall Times (Max)	10 ns (Max.) ; 3ns (Typical). Measured between 10% to 90% wave form (C <sub>L</sub> = 15pF)					
Duty Cycle / Symmetry <sup>(Note 2)</sup> <small>(see part number formatting below)</small>	'A': 40/60% (±10%) Maximum at 0.5 V <sub>DD</sub> (Standard and default) 'B': 45/55% (±5%) Maximum at 0.5 V <sub>DD</sub> (Option)					
Start-Up Time	10ms (Max) ; 5ms (Typical)					
Storage Temperature Range	-55°C to +150°C					
Ageing (Max)	±5ppm per year					
Output Enable/Disable (Function on Pin 1)	70% of V <sub>DD</sub> (min) to enable output 30% of V <sub>DD</sub> (max) to disable output					

**Note (1):** Inclusive of 25°C tolerance, operating temperature range, ±10% input voltage variation, load change, aging, shock and vibration.

**Note (2):** If symmetry is not required then standard defaults will apply.

### Part Number Format:

(Package designator) (Frequency Stability designator) (Supply Voltage and Pin Number 1 option) (Symmetry) - (Frequency)  
 8 or 14 'A' through 'H' 'A' through 'L' 'A' or 'B' MHz



A: 5V, Pin 1—Not Connected	G: 1.8V, Pin 1—Not Connected
B: 5V, Pin 1—Enable/Disable	H: 1.8V, Pin 1—Enable/Disable
C: 3.3V, Pin 1—Not Connected	I: 1.2V, Pin 1—Not Connected
D: 3.3V, Pin 1—Enable/Disable	J: 1.2V, Pin 1—Enable/Disable
E: 2.5V, Pin 1—Not Connected	K: 1.0V, Pin 1—Not Connected
F: 2.5V, Pin 1—Enable/Disable	L: 1.0V, Pin 1—Enable/Disable

#### Example 1:- 14CAA-20.000

Represents: DIP14 Oscillator, ±100ppm between 0° to 70°, 5V with no connection on Pin 1, symmetry of 40/60%, 20 MHz

#### Example 2:- 8BDB-16.000

Represents: DIP8 Oscillator, ±50ppm between 0° to 70°, 3.3V enable/disable on Pin 1, symmetry of 45/55%, 16 MHz

**Note:** The above specifications are typical only. Please contact our Sales Department for specific requirements.

