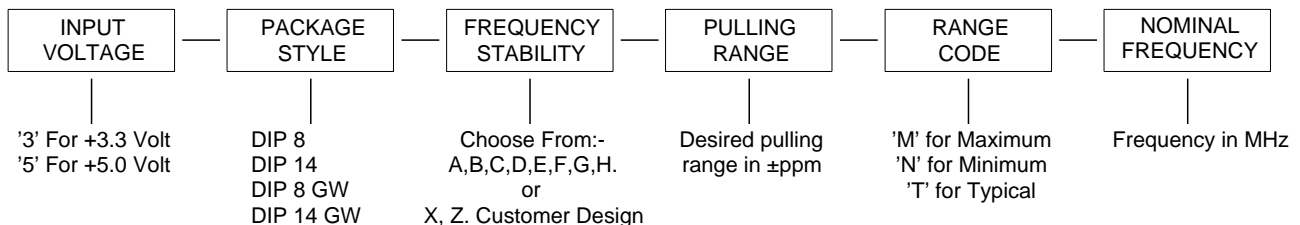


SPECIFICATION			
		3.3 VOLT SYSTEM	5.0 VOLT SYSTEM
INPUT VOLTAGE ( V <sub>DD</sub> )		( V <sub>DD</sub> ) = +3.3 Volt D.C.±5% Control Voltage Centre = +1.65V Voltage code is ' 3 '	( V <sub>DD</sub> ) = +5.0 Volt D.C.±5% Control Voltage Centre = +2.5V Voltage code is ' 5 '
FREQUENCY RANGE		500 kHz to 30 MHz 30+ MHz to 125 MHz	500 kHz to 30 MHz 30+ MHz to 160 MHz
OUTPUT VOLTAGE HIGH '1'	TTL	2.4 Volt Minimum	2.4 Volt Minimum
	CMOS	2.97 Minimum	V <sub>CC</sub> - 0.5 Minimum
OUTPUT VOLTAGE LOW '0'	TTL	0.4 Volt Maximum	0.4 Volt Maximum
	CMOS	0.33 Volt Maximum	0.5 Volt Maximum
FREQUENCY PULLING RANGE		From ±30ppm to ±150ppm Control Voltage Range: 0.3 Volt to 3.0 Volt	From ±80ppm to ±200ppm Control Voltage Range: 0.5 Volt to 4.5 Volt
FREQUENCY STABILITY (Refer note 1 )	COMMERCIAL (AVAILABLE IN ALL PACKAGE TYPES)	±10ppm over 0°C to +70°C ( Stability code is 'D' ) ±25ppm over 0°C to +70°C ( Stability code is 'A' ) ±50ppm over 0°C to +70°C ( Stability code is 'B' ) ±100ppm over 0°C to +70°C ( Stability code is 'C' ) Customer Design use code 'X'	
	INDUSTRIAL (AVAILABLE IN ALL PACKAGE TYPES)	±20ppm over -40°C to +85°C ( Stability code is 'H' ) ±25ppm over -40°C to +85°C ( Stability code is 'G' ) ±50ppm over -40°C to +85°C ( Stability code is 'E' ) ±100ppm over -40°C to +85°C ( Stability code is 'F' ) Customer Design use code 'Z'	
OUTPUT LOAD	TTL	5 to 10 TTL gates	
	CMOS	15pF to 50pF	
RISE TIME (Tr) AND FALL TIME (Tf)	TTL	10n Sec. Maximum: 3n Sec. Typical. Measured between 0.4 Volt to 2.4 Volt ( RL = 390Ω : CL = 15pF )	
	CMOS	10n Sec. Maximum: 3n Sec. Typical. Measured between 10% to 90%( V <sub>DD</sub> ) ( CL = 15pF )	
DUTY CYCLE	TTL	40% Minimum. 60% Maximum ( Measured at +1.4 Volt )	
	CMOS	40% Minimum. 60% Maximum ( Measured at 50% V <sub>DD</sub> )	
START UP TIME (Ts)		10m Sec. Maximum. 5m Sec Typical	
LINEARITY		10% Maximum. 6% Typical.	
SLOPE POLARITY (TRANSFER FUNCTION)		POSITIVE: Increasing control voltage increases output frequency. ( Standard ) NEGATIVE: Increasing control voltage decreases output frequency.	
CURRENT CONSUMPTION		15 mA to 45 mA ( Frequency dependent)	
MODULATION BANDWIDTH (±3dB)		10 kHz Minimum	
INPUT IMPEDANCE		50 kΩ at 10 kHz Minimum.	
STORAGE TEMPERATURE		-40°C to +85°C	
AGING		±5ppm per year Maximum	

NOTE 1: INCLUSIVE OF 25°C TOLERANCE, OPERATING TEMPERATURE RANGE ±10% INPUT VOLTAGE, LOAD CHANGE, AGING, SHOCK AND VIBRATION.

NOTE 2: PARAMETERS SHOWN ABOVE ARE GENERAL SPECIFICATIONS. DEPENDING ON SPECIFIC MODEL AND FREQUENCY, ACTUAL DATA MAY VARY.

### ORDERING INFORMATION



Dimensions: 13.08±0.2, 20.8±0.2, 5.0±0.2, 19.0±0.2, 0.8±0.2 TYP., 6.3±0.2 TYP., 7.62±0.2, 15.24±0.2, 1, 7, 8, 14, ø0.5±0.05 TYP.

PIN CONNECTIONS	
PIN 1:	CONTROL VOLTAGE
PIN 7:	GROUND
PIN 8:	OUTPUT FREQUENCY
PIN 14:	SUPPLY VOLTAGE

DIP-14

Dimensions: 12.7±0.2, 11.8±0.2, 0.8±0.2, 6.3±0.2, 5.0±0.2, 7.62±0.2, 1, 4, 5, 8, ø0.5±0.05 TYP.

PIN CONNECTIONS	
PIN 1:	CONTROL VOLTAGE
PIN 4:	GROUND
PIN 5:	OUTPUT FREQUENCY
PIN 8:	SUPPLY VOLTAGE

DIP-8

Dimensions: 12.8 MAX., 20.2 MAX., 1.8±0.1, 13.1±0.2, 7.6±0.2, 18.3, 0.8±0.2 TYP., 7.62±0.2, 10.7±0.2, 15.24±0.2, 5.3±0.2, 1, 7, 8, 14, 4 ø1.8 GLASS STAND - OFF, ø0.5±0.05 TYP.

PIN CONNECTIONS	
PIN 1:	CONTROL VOLTAGE
PIN 7:	GROUND
PIN 8:	OUTPUT FREQUENCY
PIN 14:	SUPPLY VOLTAGE

DIP-14 GW (GULL WING)

Dimensions: 12.8 MAX., 12.8 MAX., 1.8±0.1, 13.1±0.2, 7.6±0.2, 10.8±0.1, 0.8±0.2, 7.62±0.2, 7.62±0.2, 7.62±0.2, 1, 4, 5, 8, 3 ø1.6 GLASS STAND - OFF, ø0.5±0.05 TYP.

PIN CONNECTIONS	
PIN 1:	CONTROL VOLTAGE
PIN 4:	GROUND
PIN 5:	OUTPUT FREQUENCY
PIN 8:	SUPPLY VOLTAGE

DIP-8 GW (GULL WING)

