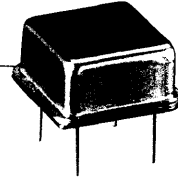


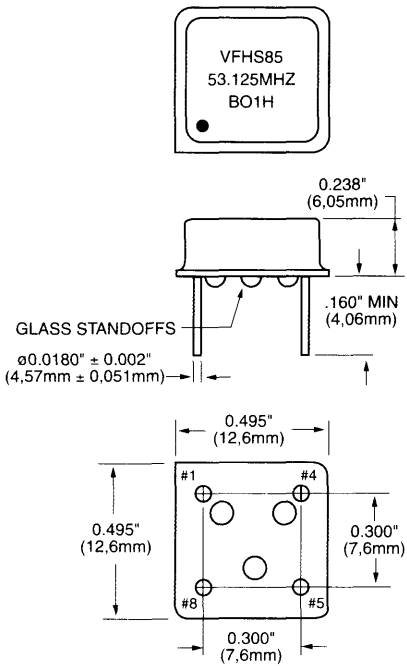
VFHS85

HCMOS Half Size DIP Clock Oscillators

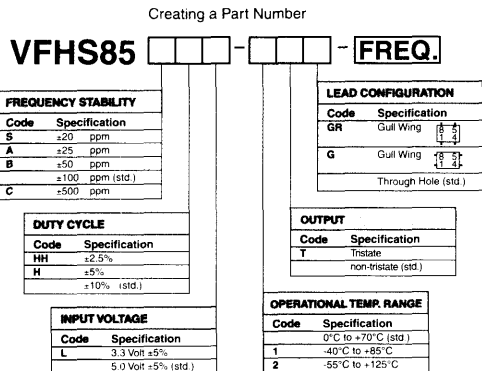


FEATURES

- Tristate Available
- Extended Temperature Ranges
- Tight Symmetry Available
- Common Footprint



All dimensions are typical unless otherwise specified.



Example: VFHS85BHL-1GR-53.125MHz: Frequency Stability ±20ppm, Duty Cycle ±5.0%, Input Voltage 3.3 Volt ±5%, Operational Temperature -40°C to +85°C, Gull Wing, Frequency 53.125MHz.

	Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Max. Ratings	Input Break Down Voltage	V _{cc}		-0.5		7.0	V	
	Storage Temp.	T _s		-55		+125	°C	
Electrical	Frequency Range	F		1.0		70	MHz	
	Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration			±100	ppm	1
	Input Voltage	V _{cc}		4.75 3.15	5.00 3.30	5.25 3.45	V	Std. LV Opt.
	Input Current	I _{cc}	No load			50	mA	2
	Load	15pF or 10 LSTTL gates						
	Duty Cycle		@50% V _{cc}	40	50	60	%	3
	Rise/Fall Time	T _r /T _f				6	ns	
	Logic "1" Level	V _{oh}	Max Load	0.9V _{cc}			V	
	Logic "0" Level	V _{ol}	Max Load			0.1V _{cc}		
	Start-up Time	T _s			2	10	ms	
	Phase Jitter		1σ			1	ps	f _i > 1KHz
	Tristate Function	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE						
Enable/Disable Time	T _e /T _d				100	ns		
Environmental and Mechanical	Operating Temperature Range	0°C to +70°C (-40°C to +85°C, and -55°C to +125°C available)						
	Mechanical Shock	Per MIL-STD-202, Method 213, Cond. E						
	Thermal Shock	Per MIL-STD-883, Method 1011, Cond. A						
	Vibration	Per MIL-STD-883, Method 2007, Cond. A						
	Soldering Conditions	260°C, for 10s, Max.						
Electrical Connections	Hermetic Seal	Leak rate less than 5 x 10 ⁻⁸ atm.cc/s of helium						
	Pin Out	Pin #1-N/C or tristate Pin #5-Output		Pin #4-Ground, Case Pin #8-V _{cc}				

- Notes:
1. ±50ppm, ±20ppm stability available.
 2. Current is load and frequency dependent.
 3. ±5%, and ±2.5% duty cycle available.
 4. Tristate available.
- All specifications are subject to change without notice.