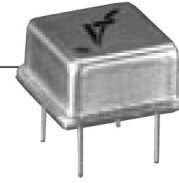


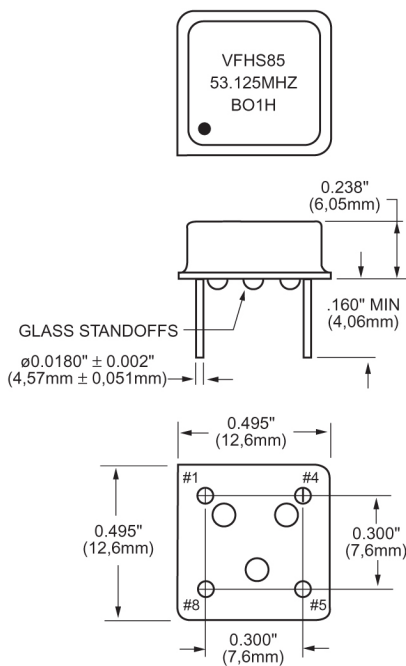
VFHS85

HCMOS Half Size DIP Clock Oscillators



FEATURES

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



All dimensions are typical unless otherwise specified.

Creating a Part Number
VFHS85 [] [] - [] - **FREQ.**

FREQUENCY STABILITY	
Code	Specification
S	±20 ppm
A	±25 ppm
B	±50 ppm
H	±100 ppm (std.)
C	±500 ppm

LEAD CONFIGURATION	
Code	Specification
GR	Gull Wing
G	Gull Wing
	Through Hole (std.)

DUTY CYCLE	
Code	Specification
HH	±2.5%
H	±5%
	±10% (std.)

OUTPUT	
Code	Specification
T	Tristate
	non-tristate (std.)

INPUT VOLTAGE	
Code	Specification
L	3.3 Volt ±5%
	5.0 Volt ±5% (std.)

OPERATIONAL TEMP. RANGE	
Code	Specification
	0°C to +70°C (std.)
1	-40°C to +85°C
2	-55°C to +125°C

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	Tr/Tf				3	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	
Environmental and Mechanical	Phase Jitter		1σ			1	ps	f _j >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	
	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						
Electrical Connections	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.						
	Hermetic Seal	Leak rate less than 5 x 10 ⁻⁸ atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1-N/C or tristate Pin #4-Ground, Case Pin #5-Output Pin #8-Vcc						

Notes:

1. ±50ppm, ±25ppm 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.