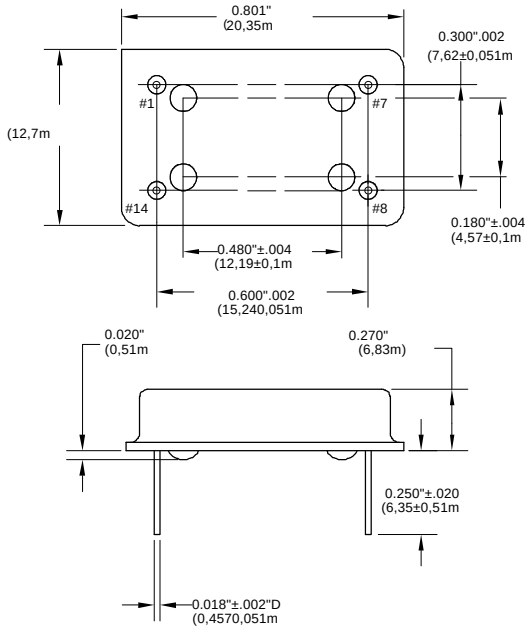
VALPEY-FISHER

VFHS170 SERIES
HCMOS
CRYSTAL CLOCK OSCILLATORS
FOR 5 V SYSTEMS

Features:

- *Tristate Output Available*
- *Low Cost*
- *Industrial Temperature Range*
- *Wide Frequency Range*
- *Very Low Phase Jitter*

Package:



All dimensions are TYP, in inches

Specifications

Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Maximum Ratings							
Input Break Down Voltage	Vcc		-0.5		7.0	V	
Storage temp.	Ts		-55		125	° C	
Electrical							
Frequency range	F		.500		70	MHz	
Frequency stability	ΔF/F	Overall	-100		100	PPM	1
Input Voltage	Vcc		4.50	5.00	5.50	V	
Input Current	Icc	unloaded	30	40	50	mA	2
Load		10 LSTTL					
Duty cycle		@ 50%Vcc	40	50	60	%	3
Rise/Fall time	Tr/Tf	20 % to 80%	8	10	15	ns	
Logic "1" level	Voh	Loaded, over all	.9Vcc			V	
Logic "0" level	Vol	Loaded, over all			.1Vcc	V	
Start up time	Ts			2	10	ms	
Phase jitter		1σ			1	ps	
Enable Time					100	ns	

Environmental and Mechanical

Operating temp. range	0°C to 70°C (-40°C to 85°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.
Hermetic Seal	Leak rate less than $5x10^{-8}$ atm.ccm/s of helium

Electrical Connections:

Pin Out	Pin #1 - Tri-State Control	Pin #2 - Case, GND
	Pin #3 - Output	Pin #4 - Vcc

Notes:

1. Standard frequency stability, others available.
2. Typical current load and frequency dependent.
3. Standard symmetry, tighter available.

Creating a part number: