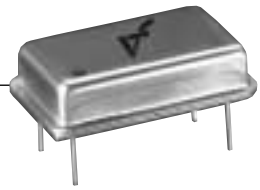
SUNSTAR微波光电 http://www.rfoe.net/ TEL:0755-83396822 FAX:0755-83376182 E-MAIL: szss20@163.com

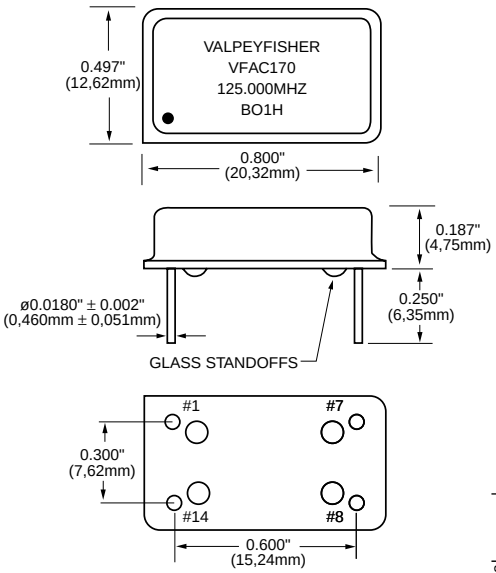
VFAC170



ACMOS/TTL Compatible Crystal Clock Oscillator

FEATURES

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



All dimensions are typical unless otherwise specified.

	Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Max. Ratings	Input Break Down Voltage	Vcc		–0.5		7.0	V	
	Storage Temp.	Ts		–55		+125	°C	
Electrical	Frequency	F		4.00		200	MHz	
	Frequency Stability	ΔF/F	Overall conditions including: calibration, temp., aging 10 yrs, shock, vibration			±100	ppm	1
	Input Voltage	Vcc		4.75 3.15	5.00 3.30	5.25 3.45	V	Std. LV Opt.
	Input Current	Icc	F = 100MHz, 15pF load, Vcc = 5V			50	mA	2
	Load	10 TTL gates or 50pF MAX, AC coupled 50 Ohm termination recommended						
	Duty Cycle		@1.4V	40	50	60	%	3
	Rise/Fall Time	Tr/Tf	50 Ohm/15pF		1	3	ns	
	Logic "1" Level	Voh	MAX Load	0.9Vcc				
	Logic "0" Level	Vol	MAX Load			0.1Vcc		
	Start–up Time	Ts			2	10	ms	
	Phase Jitter		1σ			1	ps	fj>1KHz
	Tristate Function	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE						
	Enable/ Disable Time	Te/Td				100	ns	
Environmental and Mechanical	Operating Temperature Range	0°C to +70°C (–40°C to +85°C, –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.						
	Hermetic Seal	Leak rate less than 5 x 10^{-8} atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1–Tristate Control Pin #8–Output			Pin #7–Ground, Case Pin #14–Vcc			

Notes:
1. Standard frequency stability (±20, ±25, ±50, others available).
2. Current is load and frequency dependent.
3. ±5%, and ±2.5% symmetry available.

All specifications are subject to change without notice.

Creating a Part Number

VFAC170 ☐☐☐ - ☐☐ - **FREQ.**

FREQUENCY STABILITY

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

DUTY CYCLE

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

INPUT VOLTAGE

Code	Specification
L	3.3 Volt
	5.0 Volt (std.)

OPERATIONAL TEMP. RANGE

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

*Not always available

LEAD CONFIGURATION

Code	Specification
	Through Hole (std.)
G	Gull Wing

Example: VFAC170SHH-1-125MHz: Frequency Stability ±20ppm, Duty Cycle ±2.5%, Input Voltage 5.0 Volt ±5%, Operating Temperature -40°C to +85°C, Output Tristate, Lead Configuration Straight, Frequency 125.000MHz.

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