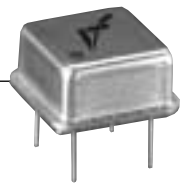
SUNSTAR微波光电 http://www.rfoe.net/ TEL:0755-83396822 FAX:0755-83376182 E-MAIL: szss20@163.com

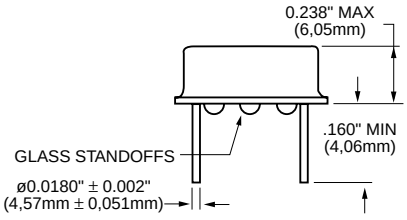
VF70

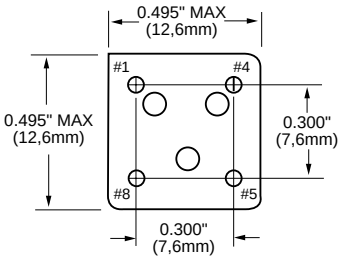


HCMOS/TTL Compatible Half Size Crystal Clock Oscillators

FEATURES

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





All dimensions are typical unless otherwise specified.

Creating a Part Number

VF70 □□□ - □□□ - **FREQ.**

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

DUTY CYCLE	
Code	Specification
H	±5%
	±10% (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*

*Not always available

OUTPUT	
Code	Specification
T	Tristate
	Non-tristate

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

Example: VF70BL-1.8432MHz: Frequency Stability ±50ppm, Duty Cycle ±10%, Input Voltage 3.3 Volt ±5%, Operating Temperature -40°C to +85°C, Output Non-Tristate, Lead Configuration Straight, Frequency 1.8432MHz.

	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		0.25		100	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	No load			60	mA	2
	Load	10 TTL gates						
	Duty Cycle		@1.4V	40	50	60	%	3
	Rise/Fall Time	Tr/Tf				6	ns	f>60MHz
	Logic "1" Level	Voh	MAX Load	2.4			V	
	Logic "0" Level	Vol	MAX Load			0.4	V	
	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	4
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.						
	Hermetic Seal	Leak rate less than 5 x 10^{-8} atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1–NC or Tristate Control Pin #5–Output		Pin #4–Ground, Case Pin #8–Vcc				

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

All specifications are subject to change without notice.

ValpeyFisher 75 South Street, Hopkinton, MA 01748 800-982-5737 508-435-6831 Fax: 508-435-5289 www.valpeyfisher.com
SUNSTAR微波光电 http://www.rfoe.net/ TEL:0755-83397033 FAX:0755-83376182 E-MAIL: szss20@163.com