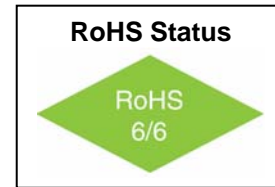


VFCXO100

XO COTS -55°C to +200°C

5x7mm SMD, HCMOS



Features

- Tight Crystal angle controlled for excellent temperature stability
- 175°C vacuum bake for 16 hours provides pre-aging and superior stability and reliability
- Optional Tristate

Applications

- Rugged environment
- Military
- Aerospace
- Down hole

**Replaces Valpey Fisher Part Numbers: T1250, T1254, T1256, T1258, T4001 ~ T4009
T3250, T3254, T3256, T3258, T4301 ~ T4309
T7250, T7254, T7256, T7258, T7001 ~ T7013
T9250, T9254, T9256, T9258, T9301 ~ T9313**

Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Frequency Range	F		20		100	MHz	
Frequency Stability	$\Delta F/F$	Vs. Operating Temperature (includes calibration, Supply Voltage, Load Change, Shock & Vibration)			± 25 ± 50 ± 100 ± 250	ppm	Order Code C Order Code B Order Code A Order Code O
		Vs. Aging		± 3 ± 1		ppm ppm	1 st Year After 1 st Year
Operating Temperature	T		-55° -55° -55° -55°		+85° +125° +175° +200°	°C	Order Code H Order Code L Order Code M Order Code N
Output		HCMOS					
Supply Voltage	Vcc		4.5 3.0	5.00 3.30	5.5 3.6	V	Order Code D Order Code E

VFCXO100

XO COTS -55°C to +200°C

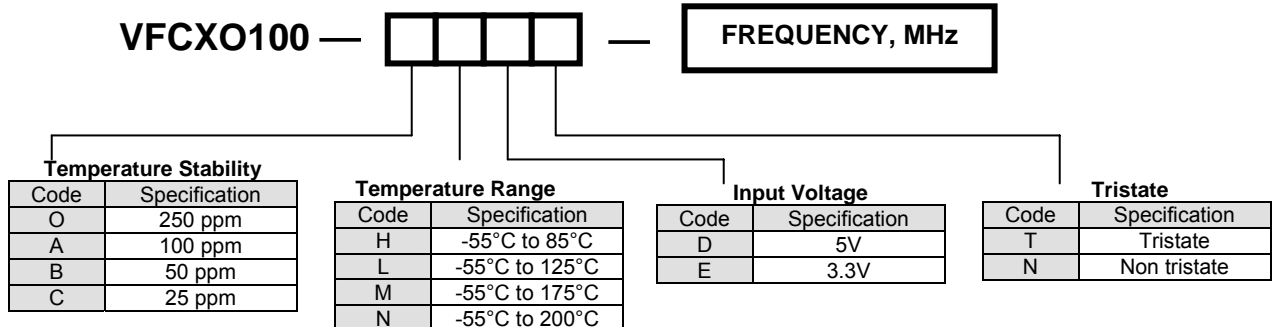
5x7mm SMD, HCMOS



Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Supply Current	I _{cc}	50 Ohm Load			40	mA	
Load	50 Ohm to V _{cc} -2V or Thevenin Equivalent Bias Required						
Duty Cycle		@ 50%	40	50	60	%	
Rise / Fall Time	T _r /T _f	V _{cc} -0.4			8	ns	
Logic "1" Level	V _{oh}	Sourcing 8mA	V _{cc} -0.4			V	
Logic "0" Level	V _{ol}	Sinking 16mA			0.4	V	
Start up time				2	10	ms	
Phase Jitter		1σ			6	ps	
TRISTATE	ACTIVE Input HIGH (>2.4V) or floating DISABLE Input LOW (<0.4V)						

How to Order



Stability	-55~+85°C	-55 ~ +125°C	-55 ~ +175°	-55 ~ +200°
250ppm	♦	♦	♦	♦
100ppm	♦	♦	♦	
50ppm	♦	♦		
25ppm	♦			

♦ Available

VFCXO100

XO COTS -55°C to +200°C

5x7mm SMD, HCMOS



Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Supply Break Down Voltage	V _{cc}		-0.5		7.0	V	
Storage Temperature	T _s		-55		+125°	°C	

Testing

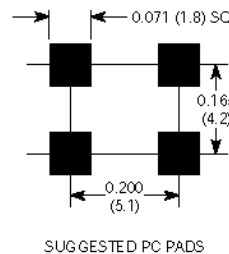
Parameter	Specification
Fine Leak	MIL-STD-883, Method 1014, Condition A1
Gross Leak	MIL-STD-883, Method 1014, Condition C
Final Test	Low, Mid. & High Temp. all electricals

Environmental Specifications

Parameter	Specification
Shock	1000g's 0.35ms, 1/2 sine wave, 3 shocks each plane
Vibration	10~2000Hz of 0.6" d.a. or 20g's. whichever is less
Humidity	Resistant to 85% R.H. at 85°C
Resistance to solvents	MIL STD 202, method 215

Pin #	Connection
1	No Connect / Tristate
2	Case, GND
3	Output
4	V _{cc}

Case:- Hermetically Sealed Ceramic LCC
 Pads :- 15 microinch gold over nickel
 Marking :- Epoxy Ink or Laser engraved



Millimeters are shown in ().

