iXHDF Series Oscillator

HCMOS, Thru-Hole XO | Freq : 1Mhz to 125Mhz

Features

Lower Cost, Faster Delivery

HCMOS Output

5V, 3.3V Operation

Tri-state

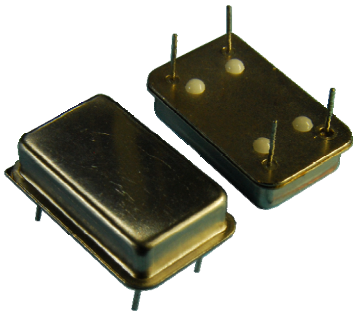
AT-Cut Crystal

Fund, 3rd Oscillation Mode.

0to70℃, -40to85℃ OPT Range.

Low RMS Phase Jitter

RoHS Compliant (pb-Free)



Dimensions(mm) **20.8 x 13.2 x 5.1max**

Absolute Maximum Ratings(*For user guidelines only*)

Parameter	Maximum Value	Units	Condition
Supply voltage(Vdd)	6	Vdc	
Operating Temperature	-40 to 85	℃	
Storage Temperature	-50 to 120	℃	Max
ESD Sensitivity	1	kV	HBM

Supply Voltage & Consumption.

Parameter	Value	Units	Condition
Supply Voltage(Vdd)	3.3V ±5%	DC	
Current Consumption	30	mA Max	@ 15pF
Supply Voltage(Vdd)	5.0V ±5%	DC	
Current Consumption	50	mA Max	@ 15pF
Start up Time(Ts)	10	mS	Max

Frequency Stabilities[1]

Parameter	Typical Value	Units	Condition
Vs. Temperature	±15	ppM max	0to70℃
	±25	ppM max	-40to85℃

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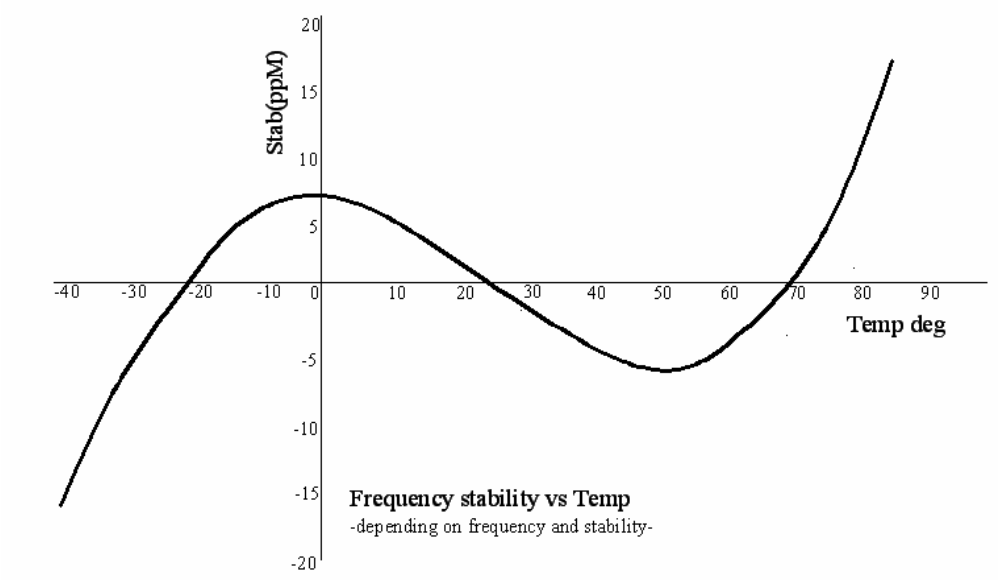
Vs. Calibration @25℃	±15	ppm max	±2℃
Vs. Vdd	±1	ppm max	±5% of Vdd
Vs. Load	±1	ppM max	±5% change
Aging 1st year	±2	ppM max	
Overall Stability	±15	ppM max	0to50℃
(includes temperature	±25	ppM max	0to70℃
And initial accuracy)	±50	ppM max	-40to85℃



RF output[1]

Parameter		Typical Value	Units	Condition
HCMOS	Output Load	15	pF	
	Rise(Tr),Fall(Tf) time	10	nS max	10to 90%
	Output Level High	10%Vdd	V min	VOH
	Output Level Low	90%Vdd	V max	VOL
	Symmetry	50±10	%	50% of Vdd

[1] About Test Condition Refer to Wave Form

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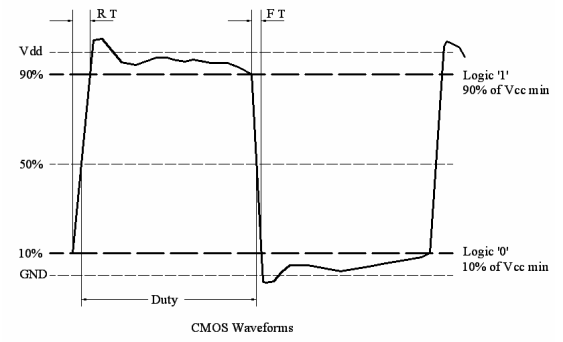
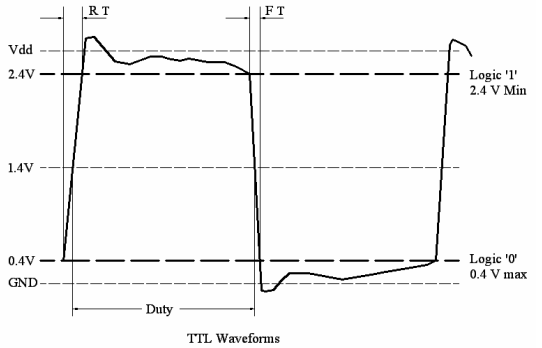
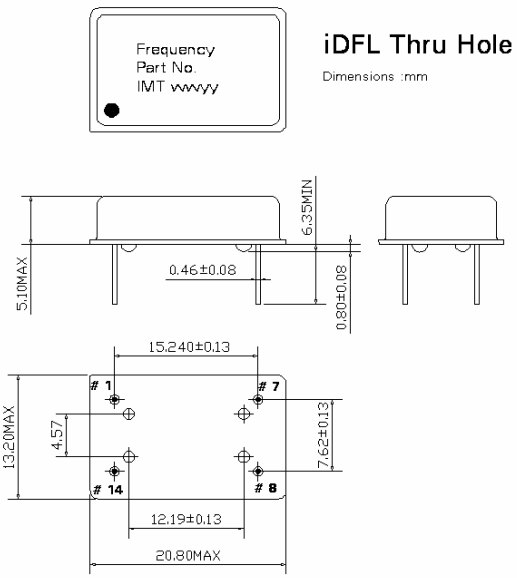
Wave Form

HCMOS	TTL
	

Mechanical Dimensions

DF Thru-Hole 14pin	Pin Connections
	Pin1 : N/C or E/D Pin7 : Ground Pin8 : Output Pin14: Supply voltage(Vdd)

TRUTH TABLE	HCMOS
Pin1	Output
"1"Level	Data
"0"Level	High
N/C	Data
N/C : No Connection	

Code:DF	Dimensions : 20.8 X 13.2 X 5.1 max

Marking

30.720Mhz iXHDF5-EE0 • IMT wwyy	-Frequency -Part No. -week/year

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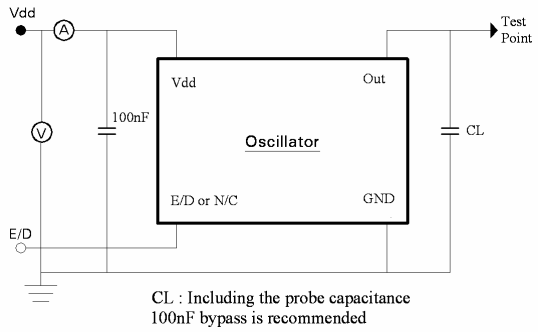
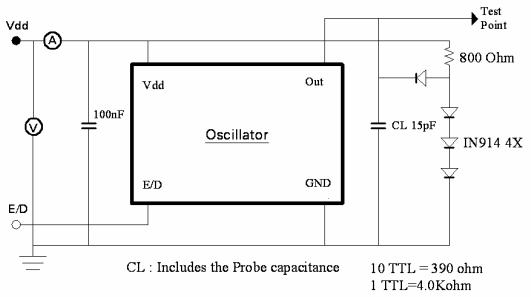
Load Configuration

HCMOS	LVTTL
	

Note : Recommend to add 100nF bypass Capacitors at Vdd and Vc

Part Numbering Guide & Code …iXHDF5-EE0-30M720-T

iX*H*DF (HCMOS)

Logic	Supply voltage	Operating Temperature	Stability	Frequency	Packaging Option
iX*H*DF	5	E	E0	30M720	T
P: LVPECL H: HCMOS L: LVDS	5:5.0V 3:3.3V	A: 0…50℃ B: 0…70℃ E:-40…85℃	A5: ±15ppM C0: ±30ppM E0: ±50ppM	30.720Mhz	T: Tape & Reel B: Bulk
Above example, Crystal Oscillator, HCMOS output, Metal 14pin package, 5.0V, -40to 85℃ Temperature range, Overall ±50ppM, at 30.720Mhz.					

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