

Farnell Order Code: 1641002
FOX MODEL: FXO-HC736R-20
FOX Part Number: 768-20-163
HCMOS, CERAMIC, SMD, OSCILLATOR

A. Specifications

Parameters	
Frequency	20.000 MHz
Frequency Stability ¹	±25 PPM
Temperature Range	
Operating (T _{OPR})	-40°C ~ +85°C
Storage (T _{STG})	-55°C ~ +125°C
Supply Voltage (V _{DD})	3.3V ± 5%
Input Current (I _{DD})	32 mA Max
Output Voltage (V _{OL}) (V _{OH})	10% V _{DD} Max 90% V _{DD} Min
Output Symmetry (50% V _{p-p} Level)	45% ~ 55%
Rise Time (10% ~ 90% V _{p-p}) (TR)	3 nS Max
Fall Time (90% ~ 10% V _{p-p}) (TF)	3 nS Max
Output Load (HCMOS)	15 pF Max
Startup Time (T _S)	10 ms Max
Output Enable / Disable Time ²	100 nS Max
Phase Jitter (12kHz ~ 20MHz)	< 1.1 pS Typ.
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au

¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.
² An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

ENABLE/DISABLE FUNCTION ²	
Pin 1	OUTPUT (Pin 3)
OPEN ²	ACTIVE
'1' Level VIH ≥ 70%V _{DD}	ACTIVE
'0' Level VIL ≤ 30%V _{DD}	High Z

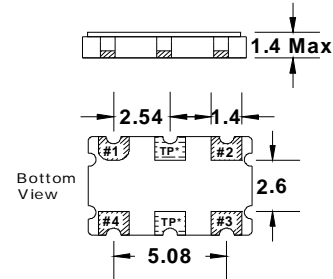
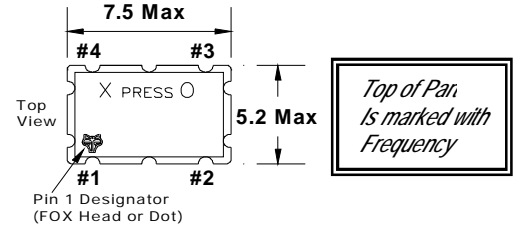
NOTE: A 0.01µF bypass capacitor should be placed between V_{DD} (Pin4) and GND (Pin 2) to minimize power supply line noise.

RoHS Compliance Status: Compliant

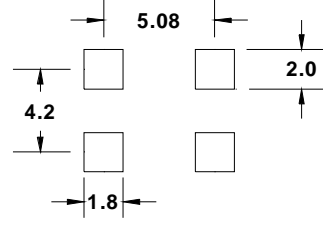


Drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may vary

B. Mechanical / Dimensions (millimeters):



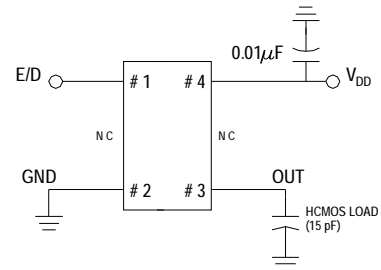
Recommended Solder Pad Layout



Note: Xpresso HCMOS XOs are designed to fit or industry standard, 4 pad, layouts.

Pin Connections
 #1) E/D #3 Output
 #2 GND #4 VDD
 *TP are test points and are NC

Recommended Circuit



NOTE: The above specifications, having been carefully prepared and checked, is believed to be accurate at the time of publication; however, no responsibility is assumed by Fox Electronics for inaccuracies.

Reference / Comments	Title / Description: Product Specifications		
	Drawing Number: DWG-4549-20	Rev: 1	Size: A
	Part Number: 768-20-163		Cage: 61429
	Draftsperson: AR	Approved: BN	Date: 08/25/2008