## **FOX**Electronics



## Farnell Order Code: 1640991 FOX MODEL: FXO-HC736R-4 FOX Part Number: 768-4-61 HCMOS, CERAMIC, SMD, OSCILLATOR

## A. Specifications

Parameters			
Frequency	4.000 MHz		
Frequency Stability <sup>1</sup>	±25 PPM		
Temperature Range			
Operating (T <sub>OPR</sub> )	-40°C ~ +85°C		
Storage (T <sub>STG</sub> )	-55°C ~ +125°C		
Supply Voltage (V <sub>DD</sub> )	3.3V ± 5%		
Input Current (I <sub>DD</sub> )	32 mA Max		
Output Voltage (VoL)	10% V <sub>DD</sub> Max		
(Vон)	90% V <sub>DD</sub> Min		
Output Symmetry (50% V <sub>p-p</sub> Level)	45% ~ 55%		
Rise Time (10% ~ 90% V <sub>p-p</sub> ) (TR)	3 nS Max		
Fall Time (90% ~ 10% V <sub>p-p</sub> ) (TF)	3 nS Max		
Output Load (HCMOS)	15 pF Max		
Startup Time (T <sub>S</sub> )	10 ms Max		
Output Enable / Disable Time <sup>2</sup>	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		

<sup>1</sup> Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

<sup>2</sup>An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

ENABLE/DISABLE FUNCTION <sup>2</sup>				
OUTPUT (Pin 3)				
ACTIVE				
ACTIVE				
High Z				

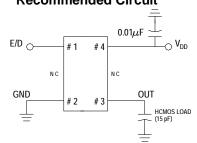
NOTE: A 0.01 $\mu F$  bypass capacitor should be placed between  $V_{\text{DD}}$  (Pin4) and GND (Pin 2) to minimize power supply line noise.

## 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

Mechanical / Dimensions (millimeters): Β. 7.5 Max #4 #3 X press O Top of Pan Top View Is marked with 5.2 Max Frequency #1 #2 Pin 1 Designator (FOX Head or Dot) \_\_\_\_1.4 Max 2.54 --- 1.4 (#IJ TP\* #2 Bottom 2.6 View (#4 #3 5.08 Recommended Solder Pad Layout 5.08 2.0 4.2 1.8 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-4549-11 Rev: 1		Size: A		
	Part Number: 768-4-61   Draftsperson: AR Approved: BN		Cage: 61429		
			N	Date: 08/25/2008	