

The Industry's Smallest Crystal Oscillator LVPECL with Ultra-Low Jitter

The UX22/UX252 XO series is the industry's smallest crystal oscillator family optimized to save board space and provide ultra-low jitter performance at 0.1ps max.

The family is ideal for applications such as 40G/100G/400G optical modules where small size and ultra-low jitter are essential. It is also designed to meet the low-jitter clock source specifications for communication systems and other high-performance equipment where board space is tight.

The family supports a wide frequency range from 100MHz to 212.5MHz and options include 2.5/3.3 V_{DD}, commercial and industrial temperature ranges, and various stabilities.



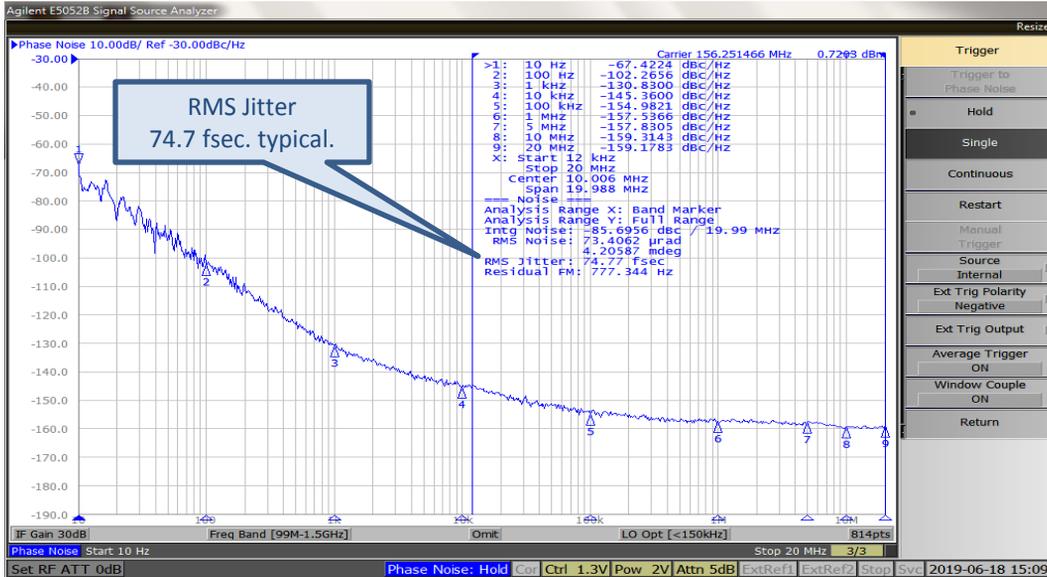
DIODES Advantage

- **The Industry's Smallest Crystal Oscillator – Only 2.5mm x 2.0mm**
Optimized for saving board space
- **Ultra-Low Jitter 0.1ps RMS Max. (12kHz to 20MHz)**
Supports 40G/100G systems and provides margin for high-performance clocking requirements
- **Wider Temperature Ranges (-20°C ~ +70°C, -40°C ~ +85°C)**
Supports both commercial and industry operating temperature systems
- **2.5V & 3.3V Power Supply:**
Supports common power rails

Applications

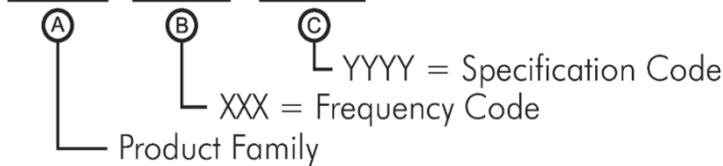
- Optical Module for 40G/100G/400G
- Networking Systems
- Servers & Storage Systems
- Profession Video Equipment

UX Measurement For Jitter Performance:



Part Ordering Information Category 1*

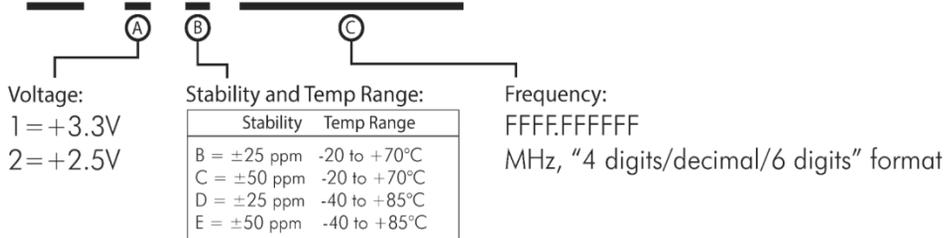
UX22 XXX YYY



Max. RMS jitter: 0.1ps, or 0.2ps, 12kHz to 20MHz
 Refer datasheet for details

Part Ordering Information Category 2*

UX 252 V I FFFF.FFFFFFF



Max. RMS jitter: 0.3ps, 12kHz to 20MHz
 Refer datasheet for details

* Please contact us for custom requirements for your specific application needs