# EURO QUARTZ

# **XOY22 Series Automotive Oscillators**

## 2.5 x 2.0mm, Wide Temp Automotive

### **FEATURES**

- Femto second integrated phase jitter 150fs typical (12kHz to 20MHz) Superior phase noise performance: -155dBc/Hz at 10kHz and -160dBc
- at 100kHz offset Wide operating temperature available to -40° to +125°C
- **Automotive grade**



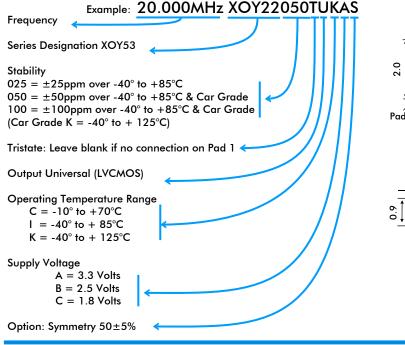
1.25MHz to 50.0MHz

## **SPECIFICATION**

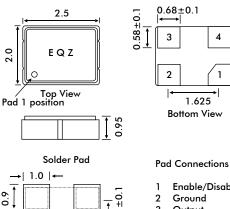
Model Number		XOY Series					
Frequency Range		1.250MHz to 50.000MHz					
Output Logic		LVCMOS					
Supply Voltage VDD		1.8 VDD ±10%	+2.5 VDD ±10%	+3.3 VDD ±10%			
Logic High "1" (90% of V <sup>DD</sup> minimum) Logic Low "0" (10% of V <sup>DD</sup> maximum)		1.62V	2.25V	2.97V			
		0.18V	0.25V	0.33V			
Current Consumption	1.25~19.99MHz	2.0mA (max)	3.0mA (max)	4.0mA (max)			
	20~50.00MHz	4.0mA (max)	5.0mA (max)	6.0mA (max)			
Rise Time (Tr) / Fall Time (Tf)		10ns (max) measured 10% ~ 90% waveform					
Load		15pF					
Start-up Time		5ms (max)					
Duty Cycle		Standard: $50\% \pm 10\%$ ; Option $50\% \pm 5\%$ (Add "S" after the part number for this option)					
Tristate Function		Tristate function on Pad 1 is standard for XOY series oscillators 70% of VDD(min) Enable Output 30% of VDD(max) Disable Output					
Phase Jitter (RMS) [26MHz, 3.3V]		150 fs typical (12kHz to 20MHz integrated)					

SSB Phase Noise [25MHz, 3.3V]	Offset	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz	5MHz	
	dBc/Hz (typical)	-94	-127	-142	-156	-161	-163	-163	
Storage Temperature	-65° to +150°C								
Ageing at 25°C ±2ppm maximum for first year									
Solder Profile	260°C max.								

## **ORDERING/PART NUMBER GENERATION**



## **OUTLINE & DIMENSIONS**



.23

1.63 ±0.1

Enable/Disable 2

0 +|

.23

4

1

- Ground 3 Output
- Supply Voltage 4

Issue 2