

XOY32 Series Automotive Oscillators

3.2 x 2.5mm, Wide Temp Automotive

1.25MHz to 50.0MHz

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





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 Vpp ±10%				
Logic High "1" (90% of V ^{DD} minimum) Logic Low "0" (10% of V ^{DD} 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: $50\%\pm10\%$; Option $50\%\pm5\%$ (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	1 kHz	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

