PRODUKT-INFO

VXO-81 · VXO-83

Voltage Controlled Crystal Oscillators

FEATURES

1. 8 Pin half size.
2. Industry standard.
3. Wide frequency range.
4. Low cost.
5. Resistance weld package.
6. 5.0V and 3.3V available.

Actual Size

APPLICATION

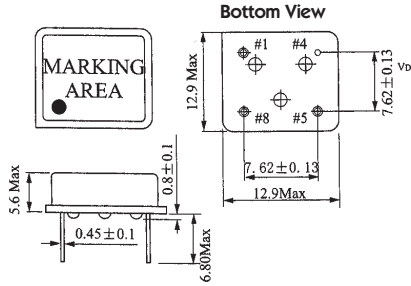
Phase locked loops, phase shift keying, in telecommunication applications as ADSL, cable modem etc.

ELECTRICAL SPECIFICATIONS				
Model		**Condition**	**VXO-81**	**VXO-83**
Frequency Range			1.0 MHz ~ 40.0 MHz	
Frequency Stability		All Conditions*	±15 ppm	
Temperature Stability		over T_{OPR}	±15 ppm / ±25 ppm / ±50 ppm	
Stability vs Power Change		V_{DD} ±5%	±5 ppm	
Stability vs Load Change		15 pF ±10%	±3 ppm	
Pullability		Over Control Voltage Range	±50, ±100, ±200 ppm	±50, ±100, ±150 ppm
Control Voltage Range			0.5V~ 4.5V	0V~ 3.3V
Operating Temperature Range			0°C to +70°C, -40°C to +85°C option	
Storage Temperature Range			-55°C to +125°C	
Supply Voltage			5.0V±5%	3.3V±5%
Supply Current		1.0 MHz ~ 23.999 MHz	15 mA max.	10 mA max.
		24.0 MHz ~ 40.0 MHz	25 mA max.	20 mA max.
Output Symmetry		at 1/2 V_{DD}	40% ~ 60%, 45% ~ 55% option	
Rise Time		20% V_{DD} ~ 80% V_{DD}	8 ns max.	10 ns max.
Fall Time		80% V_{DD} ~ 20% V_{DD}	8 ns max.	10 ns max.
Output Voltage	V_{OH}		90% V_{DD} min.	
	V_{OL}		10% V_{DD} max	
Output Load			15pF max.	
Start Time			10 ms max.	
Aging (at +25°C) first year		at +25°C ±3°C	±5 ppm / year max.	

OPTIONS: 0,01 uF bypass capacitor should be placed between V_{DD} (pin 4) and GND (pin 2) to minimize power supply line noise.
* Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration.

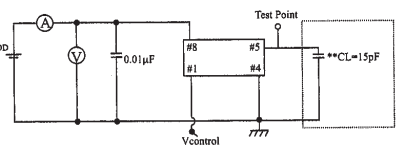
Terminal	Connection
#1	V Control
#4	GND
#5	OUTPUT
#8	V_{DD}

Dimensions (Units: mm)

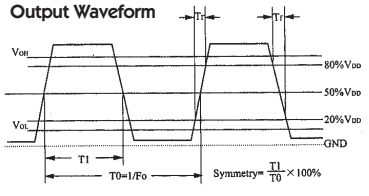


12.9 x 12.9 x 5.6

Test Circuit
incl. stray & probe capacitance



Output Waveform



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