



SPECIFICATION FOR LVDS OUTPUT SMT VCXO MtronPTI P/N M3100S094

Electrical Specifications:

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Operating Frequency	Fo		80.000000		MHz	V _C =1.65 V @ +25°C
Frequency Stability		-30		+30	ppm	Over operating temperature
Operating Temperature	TA	0		+70	°C	
Storage Temperature	Ts	-55		+125	°C	
Aging		-3		+3	ppm	1 st year
		-1		+1	ppm	Thereafter (per year)
Operating Voltage	Vcc	3.135	3.3	3.465	V	
Operating Current	lcc			125	mA	
Output Type		Differential LVDS Compatible		patible		
Output Load		100 Ω Differential		al	V	
Symmetry (duty cycle)	T _W /t	45		55	%	@ 1.25 V
Common Mode Output Voltage	V _{CM}		1.2		V	100 Ω Differential load
Differential Output Voltage	V _{OD}	250	350	450	mV	100 Ω Differential load
Rise/Fall Time	t _R /t _F			0.5	nS	From 20% to 80% of Waveform
Start-up Time	Ts∪			10	mS	
Control Voltage	Vc	0.3	1.65	3.0	V	Pad 1. Vcc = 3.3 V
Pullability		± 150			ppm	
Linearity				+5	%	Positive slope
Modulation Bandwidth	BW	10			kHz	- 3 dB V _c = 1.65 V
Input Impedance	Zvc	50			kΩ	Pad 1
Phase Jitter (RMS)				1.0	pS	12 kHz to 20 MHz
Enable Function		80% V _{CC} or N/C				Pad 2
Disable Function				0.5 V		Pad 2

Environmental & Packaging Requirements:

Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave)
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)
Thermal Cycle	Per MIL-STD-883, Method 1010, B (-55°C to 125°C, 15 min. dwell, 10 cycles)
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm cc/s of Helium)
Solderability	Per EIAJ-STD-002
Max. Soldering Conditions	See solder profile, Figure 1.
Package Type	5.0 X 7.0 X 2.0 mm 6-pad leadless ceramic. RoHS compliant.





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Mechanical, Marking, and Pin-Out Information:



Figure 1

DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
02/08/12	0	MM	Original release.
06/07/12	А	LEO	Updated "Rise/Fall Time" conditions section.
9/20/12	В	MM	Corrected APR to PULL