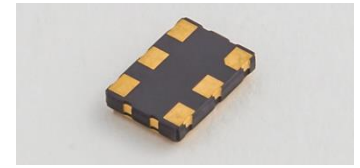


### XVO383KV1-156.250



#### ■ ELECTRICAL SPECIFICATION

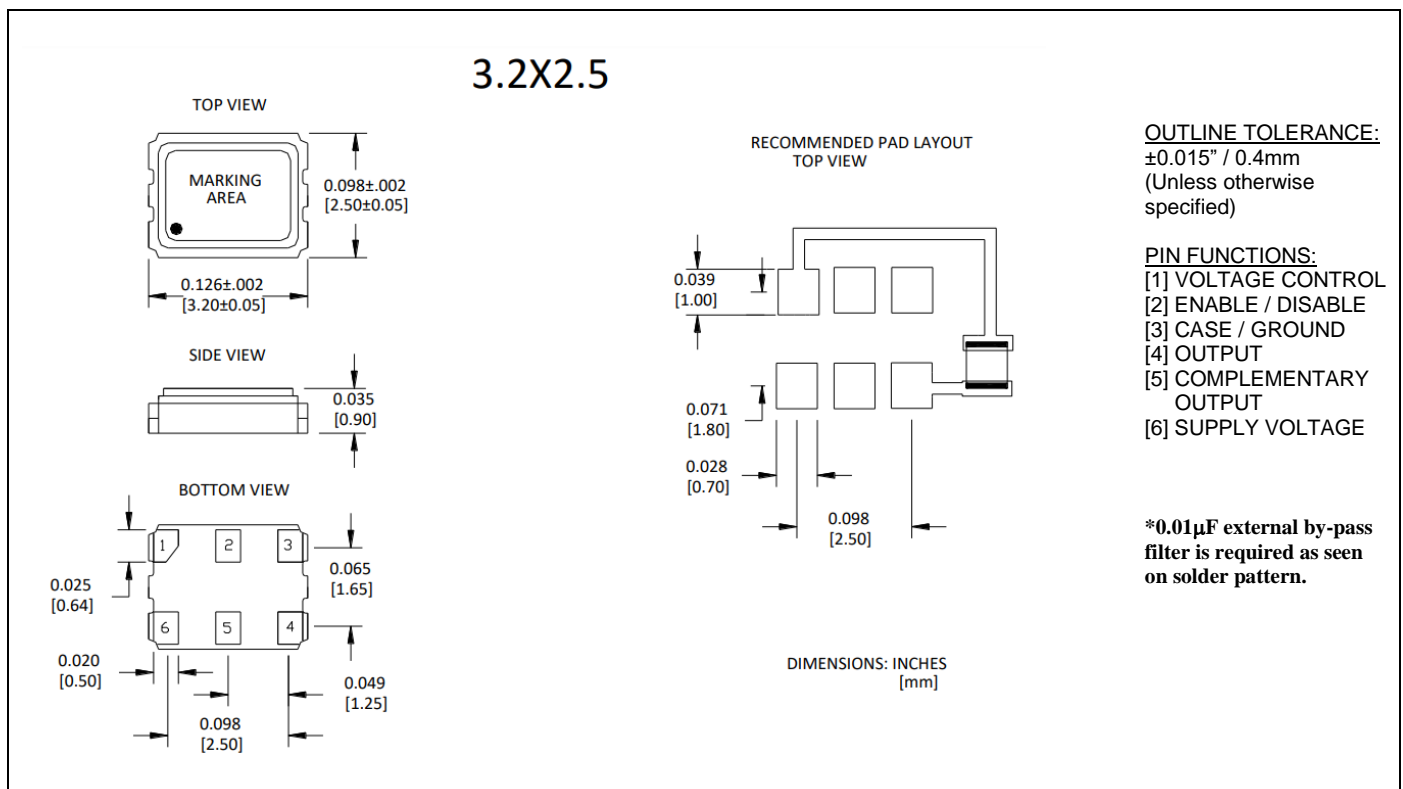
PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Frequency, nom.	Fo		156.250	MHz
Supply Voltage, nom.	Vcc	Vcc ±5%	3.3	V
Input Current, max	I	Vcc ±5%	72	mA
Stability Over Temperature Range, max	$\Delta f/\Delta T$		±50	ppm
Absolute Pull Range <sup>1</sup>	APR $\Delta f/f_c$	Min./max guaranteed frequency pull over $\Delta f/f_c$	±20	ppm
Voltage control input range	Vc		0 ~ 3.3	V
Voltage Control Center	Vc	Centered = ½ (Vcc)	1.65	V
Vc Input Impedance, typ.	Zin	Vcc = 3.3V, 0 ≤ Vc ≤ Vcc	500	kΩ
Linearity, max	Lin	Positive slope	±10	%
Enable / Disable	E	PIN 2=HIGH or open (min)	2.475	V
	D	PIN 2=LOW (max)	0.3	V
Operating Temperature Range	Ta		-40 ~ +85	°C
Storage Temperature Range	T(stg)		-55 ~ 125	°C
RMS Phase Jitter, max.	J	RMS Fj=12 kHz...20MHz	0.6	ps

<sup>1</sup> Inclusive of 25°C calibration, tolerance, operating temperature range, input voltage variation, load change, 20 years aging, shock and vibration

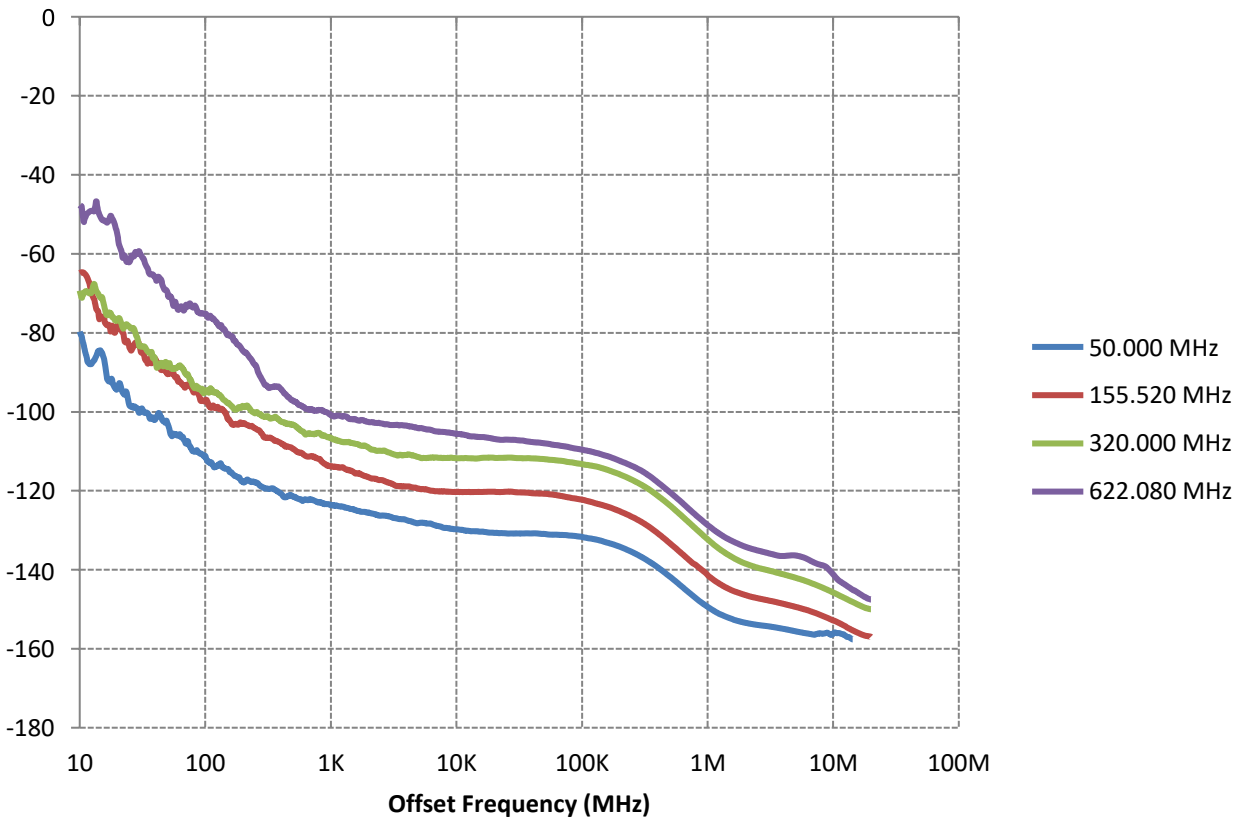
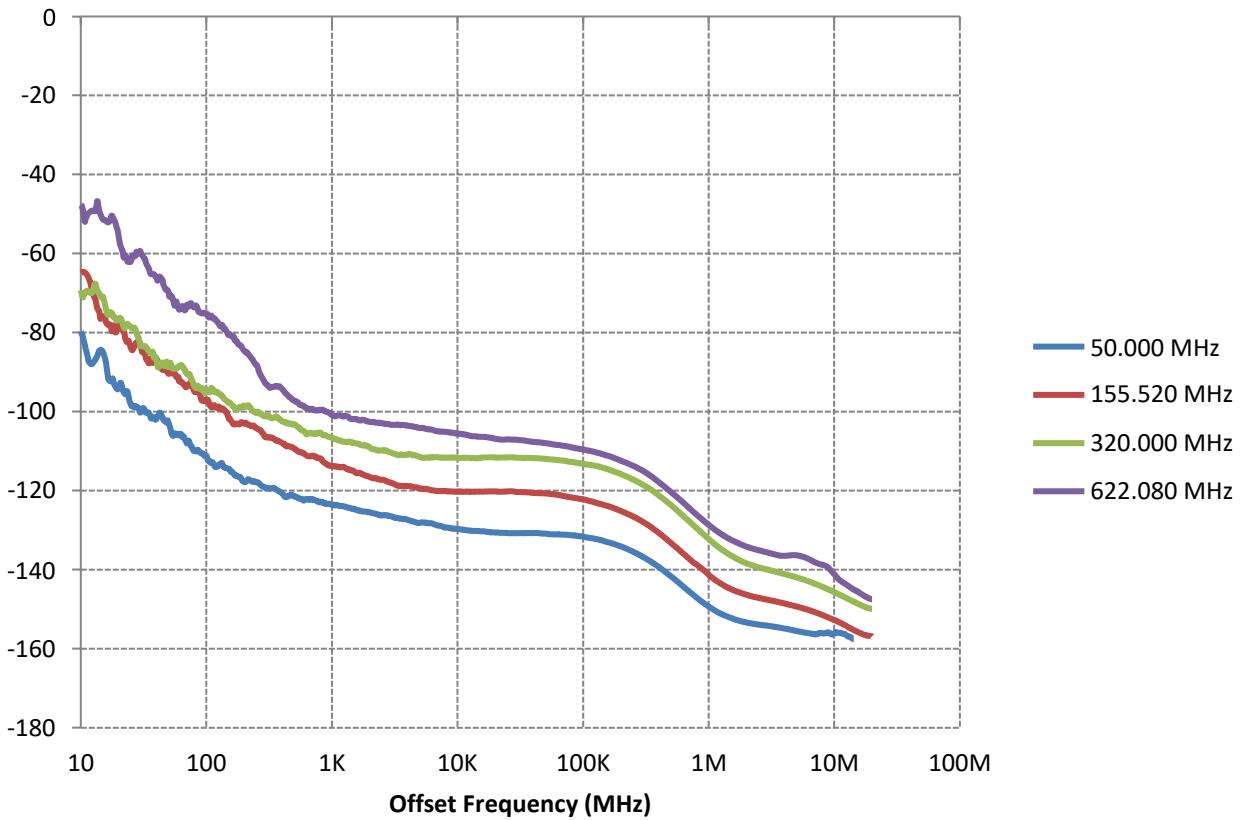
### ■ LVDS OUTPUT CHARACTERISTICS

PARAMETER	SYMBOL	CONDITION	VALUE			UNIT
			Min	Typ.	Max	
Differential Output Voltage	$V_{OD}$	Output termination $100\Omega$ to $V_{CC} - 2.0V$ , $3.3V \pm 5\%$		0.6		V
Rise/Fall Time	$T_r/T_f$	10%~90%			0.35	ns
Offset voltage	$V_{OS}$			1.3		V
Duty cycle	DC	Measured at 50% of $V_{CC}$	45		55	%
Output Load	$O_{CL}$	Differential $100\Omega$ Load Connected Between Each Output			100	$\Omega$

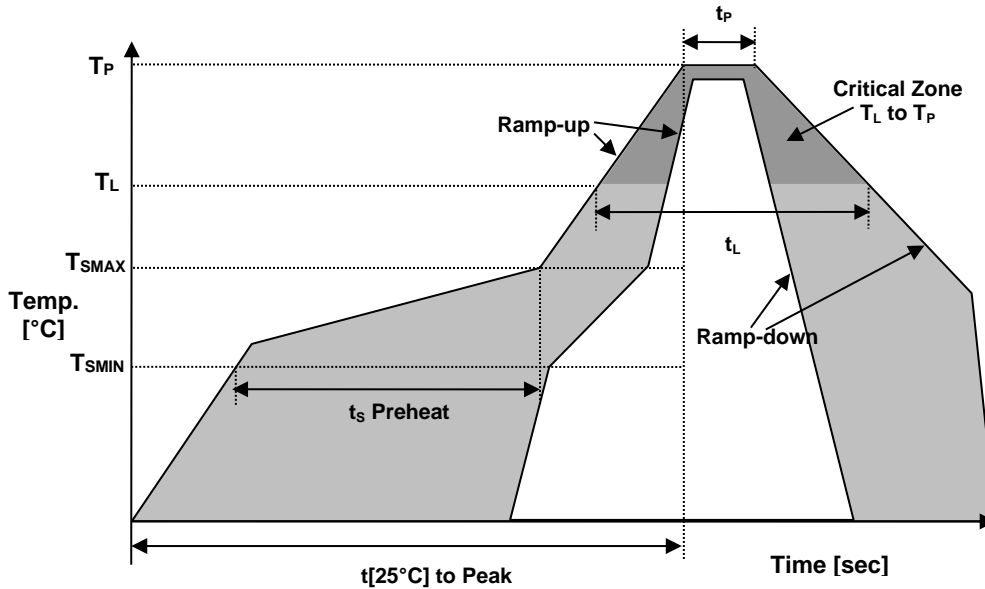
### ■ MECHANICAL SPECIFICATION



### ■ PHASE NOISE (TYPICAL):



### REFLOW PROFILE



Reflow profile IPC/JEDEC J-STD-020 REV. C		
Temperature Min Preheat	$T_{SMIN}$	150°C
Temperature Max Preheat	$T_{SMAX}$	200°C
Time ( $T_{SMIN}$ to $T_{SMAX}$ )	$t_s$	60-180 sec.
Temperature	$T_L$	217°C
Peak Temperature	$T_P$	260°C
Ramp-up rate	$R_{UP}$	3°C/sec max.
Ramp-down rate	$R_{DOWN}$	6°C/sec max.
Time within 5°C of Peak Temperature	$t_p$	10 sec.
Time $t[25^\circ\text{C}]$ to Peak Temperature	$t[25^\circ\text{C}]$ to Peak	480 sec.
Time	$t_L$	60-150 sec.

### ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
REACH-SVHC	Compliant
RoHS	Compliant
TERMINATION FINISH	Au



RALTRON
Eng. approval, date: XL, May 15, 2020
Created by, date: CP, May 15, 2020
Revision: A

Raltron Electronics / RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort to ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided only for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.

Copyright © 2016, Raltron Electronics / RAMI Technology USA, LLC. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Raltron Electronics / RAMI Technology USA, LLC.