

## ● FEATURES

- 3.3 & 5.0 VOLTS - FR5
- SMT 9x14 FR5 MINIATURE PACKAGE
- LOW JITTER PECL OUTPUT
- UTILIZING HIGH FREQUENCY FUNDAMENTAL CRYSTAL DESIGN
- ENABLE/DISABLE OPTION
- STANDARD TEMPERATURE RANGE OR EXTENDED
- COMPLIMENTARY OUTPUT OPTION

**VC-VE8850A-LZ-100-FREQ.-CF-EL**

## ● SPECIFICATIONS

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
FREQUENCY, NOM	$f_o$	-	155.520; 166.6286; 177.737142; 178.571428	MHz
SUPPLY VOLTAGE, NOM	$V_{cc}$	$V_{cc} \pm 5\%$	+5.0 (OPTIONAL +3.3VDC)	V
SUPPLY CURRENT, MAX	$I_s$	$V_{cc} = +5.0VDC, V_c = +2.5VDC, T_a = +25^\circ C,$ $50\Omega$ TO +3.0VDC LOAD	135.0	mA
PECL OUTPUT LEVELS	VOH/VOL	LOAD=50 $\Omega$ TO +3.0VDC	+3.98/+3.38	V
DUTY CYCLE	DC	LOAD=50 $\Omega$ TO +3.0VDC / @+3.6VDC	40...60	%
RISE AND FALL TIME	$t_r / t_f$	20% ~ 80% $V_{out}$ , 80% ~ 20% $V_{out}$ , MAX	1.0	ns
JITTER, rms, MAX	J	$F_j = 12kHz \dots 20MHz$	1.0	ps
FREQ. STABILITY VS TEMPERATURE, MAX	$\Delta f/f_c (T_a)$	$T_a = 0^\circ C \dots +70^\circ C$ , (REF. TO 25 $^\circ C$ ) (OPTIONAL -40 $^\circ C$ TO +85 $^\circ C$ )	$\pm 50.0$	PPM
FREQ. STABILITY VS SUPPLY, MAX	$\Delta f/f_c (\Delta V_{cc})$	$\pm 5\%$ SUPPLY CHANGE	$\pm 5.0$	PPM
FREQ. STABILITY VS. LOAD, MAX	$\Delta f/f_c (\Delta load)$	$\pm 10\%$ LOAD CHANGE	$\pm 3.0$	PPM
AGING	$\Delta f/f_c (\Delta t)$	$\Delta T = 1st$ YEAR $\Delta T = PER$ YEAR THEREAFTER	$\pm 3.0 \dots \pm 5.0$ $\pm 2.0$	PPM
CONTROL VOLTAGE RANGE	$V_c$	DC	+0.5...+4.5	V
FREQ. PULLING RANGE, MIN	$\Delta f/f_c$	OVER THE CONTROL VOLTAGE RANGE	$\pm 100.0$	PPM
SETTABILITY	$V_{fo}$	$T_a = +25^\circ C \pm 1^\circ C$	$\pm 2.5 \pm 0.5$	V
LINEARITY, MAX	$\Delta f/V$	POSITIVE SLOPE	$\pm 10$	%
INPUT IMPEDANCE, MIN	$Z_{in}$	-	47.0	K $\Omega$
MODULATION FREQ. BANDWIDTH, MIN	MBW (-3dB)	$V_{cc} = +5.0VDC, V_c = +2.5VDC, T_a = +25^\circ C,$ $50\Omega$ TO +3.0VDC LOAD	10.0	KHz
ENABLE	$E_n$	PIN 2=LOW, $V_{cc}$ -1.620 (MAX)	ENABLED	-
DISABLE	$Dis$	PIN 2=HIGH, $V_{cc}$ -1.025 (MIN)	PIN 4=LOW, PIN 5=HIGH	-
OPERATING TEMPERATURE	$T_a$	-	0...+70	$^\circ C$
STORAGE TEMPERATURE	$T(stg)$	-	-40...+90	$^\circ C$
ABSOLUTE VOLTAGE RANGE	$V_{cc}, V_c(abs)$	NON-DESTRUCTIVE, DC	-0.5...+7.0	V

## ● OUTLINE DRAWING

