

## FEATURES

- 3.3 & 5.0 VOLT - SMD FR5
- LOW JITTER PECL OUTPUT
- UTILIZING A FUNDAMENTAL HFF RESONATOR / DIRECT MULTIPLICATION LFF RESONATOR
- ENABLE/DISABLE OPTION
- STANDART TEMP. RANGE OR EXTENDED
- COMPLIMENTARY OUTPUT OPTION

VH850A-LZ-100-FREQ.-EL

## SPECIFICATIONS

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
FREQUENCY, NOM	fo	-	155.520; 166.6286; 177.737142; 178.571428	MHz
SUPPLY VOLTAGE, NOM	Vcc	Vcc±5%	5.0 (OPTIONAL +3.3VDC)	V
SUPPLY CURRENT, MAX	Is	Vcc=+5.0VDC, Vc=+2.5VDC, Ta=+25°C, 50Ω TO Vcc-2VDC LOAD	135.0	mA
PECL OUTPUT LEVELS	VOH/VOL	LOAD=50Ω TO Vcc-2VDC	3.98/3.38	V
DUTY CYCLE	DC	LOAD=50Ω TO Vcc-2VDC / 50% Vcc	40...60	%
RISE AND FALL TIME	tr / tf	20% ~ 80% Vout, 80% ~ 20% Vout, MAX	1.0	ns
JITTER, RMS, MAX	J	Fj=(12KHz...20MHz)	1.0	ps
FREQ. STABILITY VS TEMPERATURE, MAX	Δf/fc (Ta)	Ta=0°C...+70°C, (REF. TO 25°C) (OPTIONAL -40°C TO +85°C)	±50.0	PPM
FREQ. STABILITY VS SUPPLY, MAX	Δf/fc (ΔVcc)	±5% SUPPLY VARIATION	±5.0	PPM
FREQ. STABILITY VS. LOAD, MAX	Δf/fc (Δload)	±10% LOAD VARIATION	±3.0	PPM
FREQ. STABILITY VS. CALIBRATION, MAX	(fo-fc)/fo	Vcc=+5.0VDC, Vc=+2.5VDC, Ta=+25°C, 50Ω TO Vcc-2VDC LOAD	±15.0	PPM
AGING	Δf/fc (Δt)	ΔT =1 <sup>st</sup> YEAR ΔT =PER YEAR THEREAFTER	±4.0 ±2.0	PPM
CONTROL VOLTAGE RANGE	Vc	DC	+0.5...+4.5	V
FREQ. PULLING RANGE	Δf/fc	OVER THE CONTROL VOLTAGE RANGE	±100.0	PPM
LINEARITY, MAX	Δf/V	POSITIVE SLOPE	±10	%
INPUT IMPEDANCE, MIN	Zin	-	47.0	KΩ
MODULATION FREQ. BANDWIDTH, MIN	MBW(-3dB)	Vcc=+5.0VDC, Vc=+2.5VDC, Ta=+25°C, 50Ω TO Vcc-2VDC LOAD	10.0	KHz
ENABLE	En	PIN 6=LOW, Vcc-1.620 (MAX)	ENABLED	-
DISABLE	Dis	PIN 6=HIGH, Vcc-1.025 (MIN)	DISABLED	-
OPERATING TEMPERATURE	Ta	-	0...+70 -40...+85 (OPTIONAL)	°C
STORAGE TEMPERATURE	T(stg)	-	-40...+90	°C
ABSOLUTE VOLTAGE RANGE	Vcc, Vc(abs)	NON-DESTRUCTIVE, DC	-0.5...+7.0	V

## OUTLINE DRAWING

