

FEATURES

- VCXO
- LOW JITTER
- 3rd OVERTONE CRYSTAL DESIGN

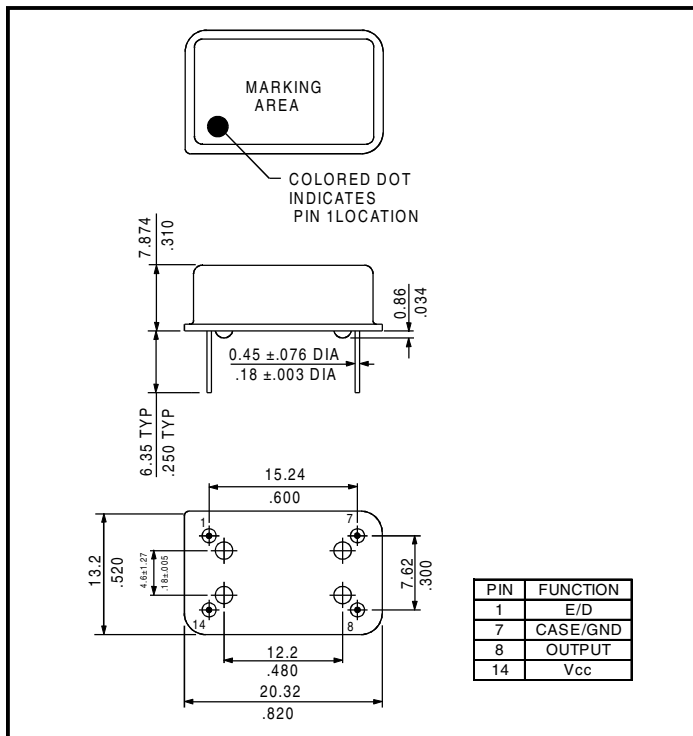
MODEL VC7225A

REVISION: B
DATE: 11/01/01

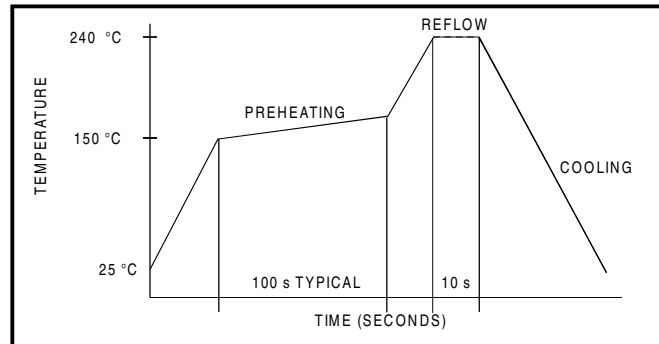
SPECIFICATIONS

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
FREQUENCY, NOM	fo	-	125.00, 133.00, 156.25	MHz
SUPPLY VOLTAGE, NOM	Vcc	Vcc ±5%	5.0	V
SUPPLY CURRENT, MAX	Is	Vcc=+5.0 VDC, Vc=+2.5VDC, Ta=+25°C, 15pF LOAD	70.0	mA
HCMOS OUTPUT LEVEL	VOH / VOL	LOAD = 15pF ±5%	4.5 / 0.5	V
DUTY CYCLE	DC	LOAD = 15pF / 50% Vcc	40..60	%
RISE AND FALL TIME	tr/tf	20%~80%, 80%~20% Vout, MAX	3	nS
PHASE NOISE AT FREQ. OFFSET	$\mathcal{L}(\Delta f)$ s	$\Delta f = 10\text{Hz}$ $\Delta f = 100\text{Hz}$ $\Delta f = 1\text{kHz}$ $\Delta f = 10\text{kHz}$	-65 -100 -125 -140 -145	dBc/Hz
FREQ. STABILITY VS. TEMP. MAX	$\Delta f/f_c (T_a)$	Ta = 0°C...+70°C,(REF. TO +25°C)	±25.0	PPM
FREQ. STABILITY VS. SUPPLY VOLT MAX	$\Delta f/f_c (\Delta V_{cc})$	SUPPLY VARIATION = ±5%	±5.0	PPM
FREQ. STABILITY VS. LOAD, MAX	$\Delta f/f_c (\Delta \text{Load})$	LOAD VARIATION = ±10%	±3.0	PPM
FREQ. STABILITY VS. CALIBRATION, MAX	$(f_c - f_o)/f_o$	Vcc = +5.0VDC, Vc=+2.5VDC, Ta=+25°C, 15pF LOAD	±5.0	PPM
AGING	$\Delta f/f_c (\Delta t)$	$\Delta t = 10 \text{ YEARS}$	±20.0	PPM
CONTROL VOLTAGE	Vc	DC	+0.5...±4.5	V
FREQUENCY PULLING RANGE, MIN	$\Delta f/f_c (\Delta V_c)$	OVER THE CONTROL VOLTAGE RANGE	±30.0...±50.0	PPM
LINEARITY, MAX	$\Delta f/V$	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, 15pF LOAD	10.0	kHz
OPERATING TEMPERATURE RANGE	Ta	-	0...+70	°C
STORAGE TEMPERATURE RANGE	T(stg)	-	-40...+90	°C
ABSOLUTE VOLTAGE RANGE	Vcc, Vc(abs)	NON-DESTRUCTIVE,DC	-0.5...+7.0	V

OUTLINE DRAWING



SOLDER REFLOW PROFILE



PACKAGING

25 PIECES PER PLASTIC TUBE

EXAMPLE

VC7225A-LZ-30-125.000