

9X14 PECL J-LEADED VCXO (SEE PAGE TWO FOR PART NUMBERING SCHEME)

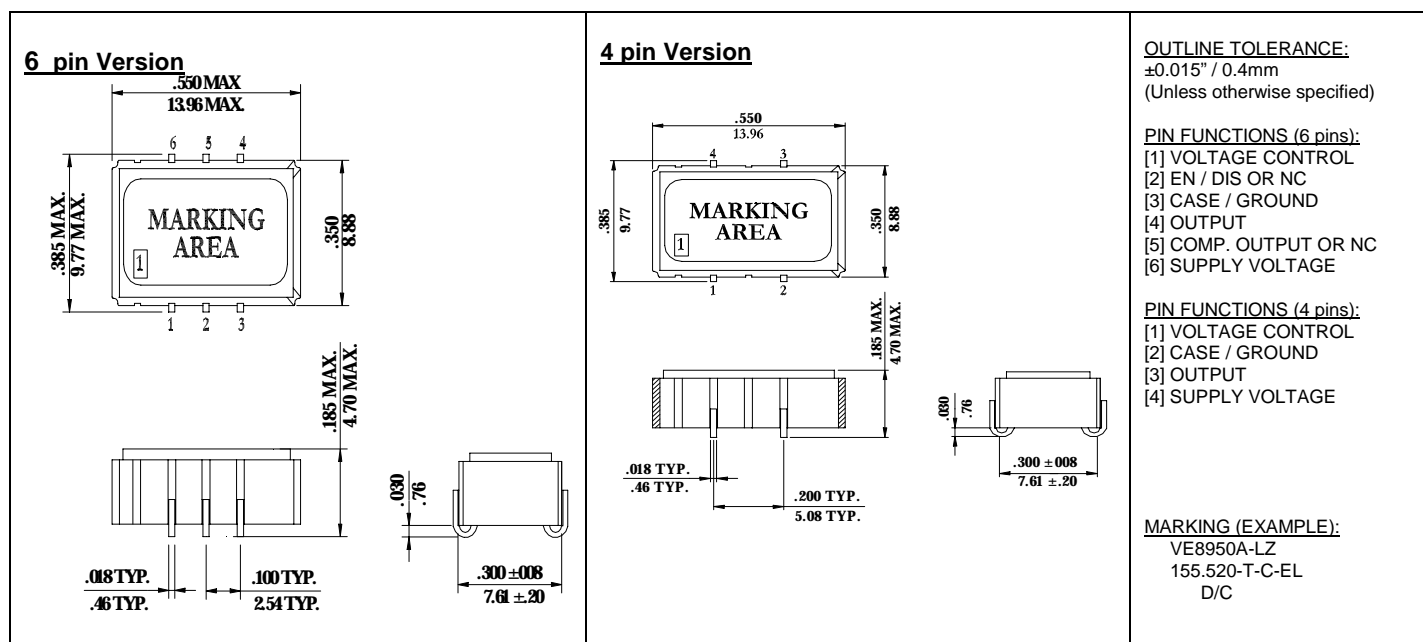
****ROHS COMPLIANT***

ELECTRICAL SPECIFICATION

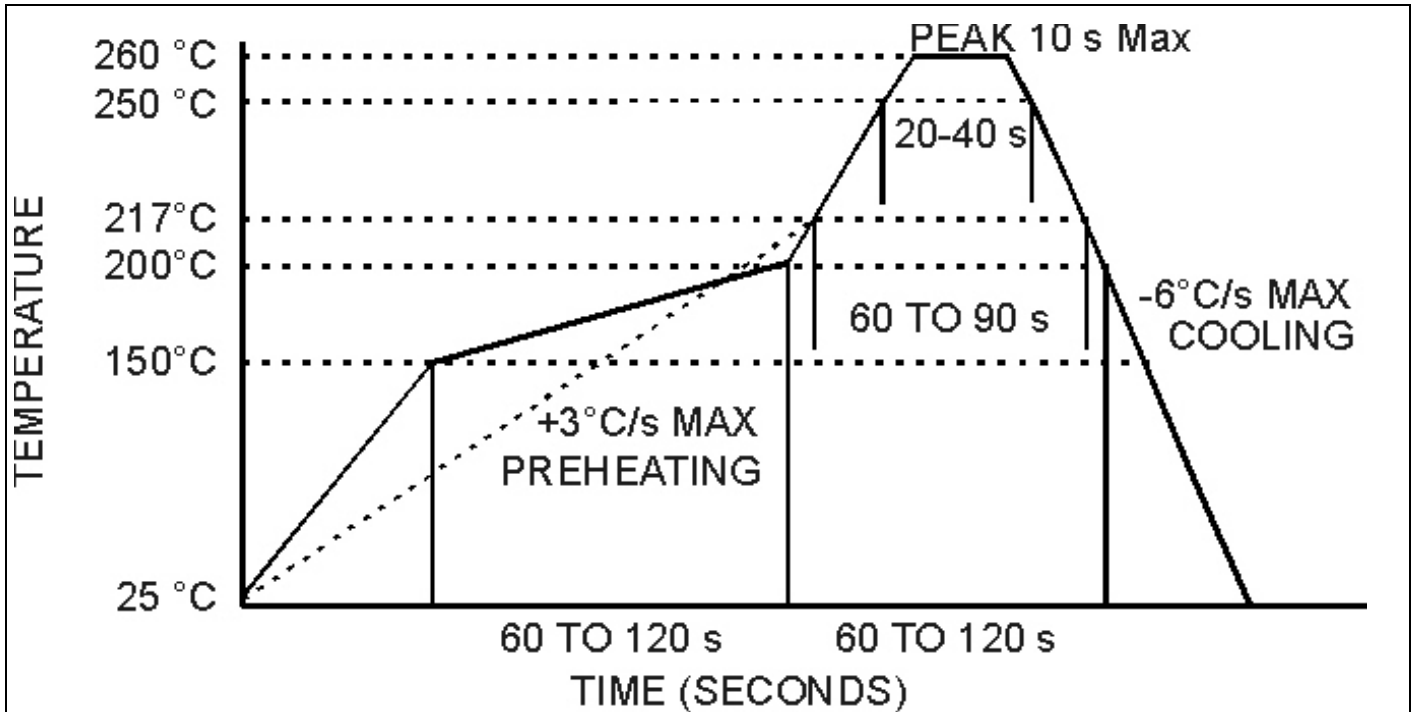
| PARAMETER | SYMBOL | CONDITIONS | VALUE | UNIT |
|----------------------------------|--------------|--|--|------|
| Frequency, nom | fo | - | 70.000-207.000 | MHz |
| Supply voltage, nom. | Vcc | Vcc±5% | 3.3VDC 5.0VDC | V |
| Supply current, max. | Is | Vcc=+3.3V/Vc=+1.65V OR +5.0V/Vc=+2.5V Ta=+25°C, 50Ω to Vcc-2.0VDC load | 135.0 | mA |
| PECL output level | VOH / VOL | Vcc=+3.3VDC, load=50Ω to Vcc-2.0VDC | 2.275 / 1.68 3.975/3.38 | V |
| Duty cycle | DC | load=50Ω to Vcc-2.0VDC / @50%Vcc, Ta=+25°C | 40...60 OR 45...55 | % |
| Rise- / fall time, max. | tr / tf | 20%~80% Vout, 80%~20% Vout, max | 0.330...1.0 (see note A) | ns |
| Jitter, rms, max. | J | 1σ, Fj=12KHz...20MHz | 1.0 | ps |
| Overall freq. stability, max. | Δf/fc | Including operating temp., ±5% load & supply variations, calibration @+25°C, and 10 year aging | SEE PART NUMBER GENERATION TABLE | ppm |
| Control voltage range | Vc | DC | 0...+3.3 +0.5...+4.5 | V |
| Pullability min | APR | Vc= 0~3.3V (at Vcc=3.3V) Vc=0.5~4.5V (at Vcc=5.0V) | SEE PART NUMBER GENERATION TABLE | ppm |
| Linearity, max. | Δf/V | - | 10 | % |
| Input impedance, min. | Zin | - | 10.0 | KΩ |
| Modulation freq. bandwidth, min. | MBW (-3dB) | Vcc=+3.3V/Vc=+1.65V OR +5.0V/Vc=+2.5V Ta=+25°C, 50Ω to Vcc-2.0VDC load | 10.0 | KHz |
| Enable option | En | Pin 2=Low, Vcc-1.620 (max.) | Enabled | - |
| Disable option | Dis | Pin 2=High, Vcc-1.025 (min.) | Pin 5 will assume a fixed level of logic "0", and pin 4 will assume a fixed level of logic "1" | - |
| Operating temperature range | Ta | - | SEE PART NUMBER GENERATION TABLE | °C |
| Storage temperature range | T(stg) | - | -55...+90 | °C |
| Absolute voltage ranges | Vcc, Vc(abs) | Non-destructive, DC | -0.5...+7.0 | V |

NOTE A: RISE AND FALL TIME VALUES (tr/tf) ARE FREQUENCY DEPENDENT.

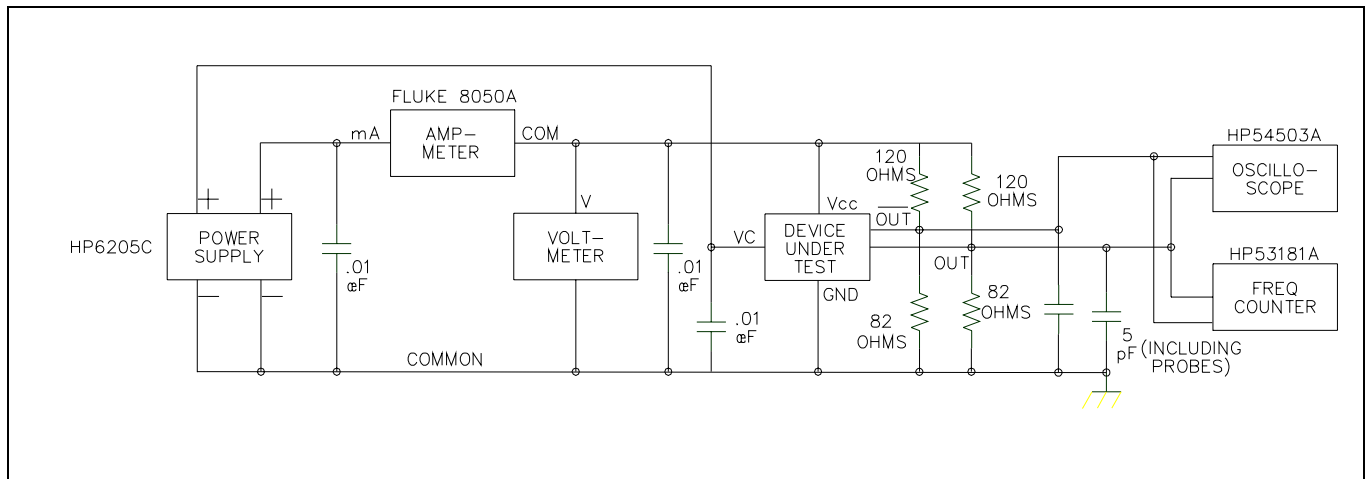
MECHANICAL SPECIFICATION



■ REFLOW SOLDER



■ ELECTRICAL TEST DIAGRAM



■ PART NUMBER GENERATION

| SERIES | OVERALL STABILITY | REV | TEMP. RANGE (°C) | PULLABILITY (PPM) | FREQUENCY (MHz) | OPTIONS | SUFFIX |
|--|---------------------------|-----|--|--|------------------|------------------------------------|--------------------|
| VC88: 5.0V PECL, NO E/D VC89: 3.3V PECL, NO E/D VE88: 5.0V PECL, E/D VE89: 3.3V PECL, E/D | 50: ±50ppm 00: ±100ppm | A | LV: 0...+50 LZ: 0...+70 HZ: -20...+70 D3: -40...+85 | 25:±25 ppm 30:±30 ppm 50:±50 ppm 80:±80 ppm 100:±100 ppm 150:±150 ppm | 70.000...207.000 | C: COMP. OUTPUT T: 45...55 DUTY | EL (See note 2) |

NOTE:

- Variations from standard specification are available, please contact factory.
- EL is added at the end of the part number for all PECL vcxo's with enable/disable option.

EXAMPLE: VE8950A-LZ-100-155.520-T-C-EL