

**PECL COMPATIBLE CRYSTAL OSCILLATOR IN CERAMIC LCC PACKAGE - XO53PE Series**

**FEATURES**

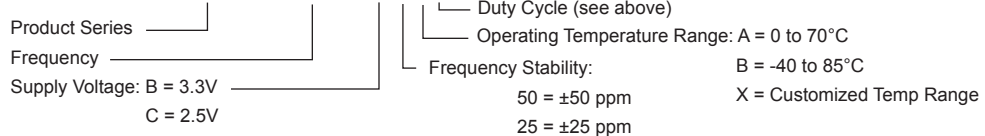
- RoHS Compliant (Pb-Free), Best Suited for ECL Logic Devices
- Very Low Phase Jitter, Excellent Noise Margin, No Internal PLL
- 5 x 3.2 mm Leadless Chip Carrier (LCC) Package, Industry de facto Standard Footprint
- Complimentary Output, Tri-state Enable/Disable Standard or Option

**SPECIFICATIONS**

|                                     |   |
|-------------------------------------|---|
| <b>Frequency Range</b>              | 25 MHz to 270 MHz   |
| <b>Input Voltage (Vcc)</b>          | B = +3.3 VDC ± 5%; C = +2.5 VDC ± 5%  |
| <b>Input Current</b>                | 88 mA Maximum, depending on frequency and output load   |
| <b>Storage Temperature</b>          | -55°C to 125°C  |
| <b>Overall Frequency Stability</b>  | 50 = ±50 ppm; 25 = ±25 ppm  |
| <b>Temperature Range</b>            | A = 0°C to 70°C; B = -40°C to 85°C  |
| <b>Standard Stability</b>           | 50A = ±50 ppm / 0°C to 70°C   |
| <b>Electric Option (Duty Cycle)</b> | 1 = Tristate 60/40%; 3 = Tristate 55/45%; 5 = Tristate 52.5/47.5%<br>0 = No tristate 60/40%; 2 = No tristate 55/45%; 4 = No tristate 52.5/47.5% |
| <b>Output Load</b>                  | 50 Ohms to Vcc - 2V or Thevenin Equivalent, Bias Required   |
| <b>Logic "1" / Logic "0" Level</b>  | (Vcc - 1.02V) Minimum / (Vcc - 1.63V) Maximum   |
| <b>Rise/Fall Time (Tr/Tf)</b>       | 0.7 ns Typical, 1 ns Maximum at 20% to 80% Vp-p   |
| <b>Start-up time</b>                | 5 ms Maximum  |
| <b>Phase Jitter (RMS, 1 Sigma)</b>  | 0.3 ps Typical, 1 ps Maximum for fj = 12KHz to 20MHz  |
| <b>Phase Noise</b>                  | -120 dBc/Hz at 1KHz, -140 dBc/Hz at 10KHz, -145 dBc/Hz at 100KHz  |
| <b>Tristate Function</b>            | Input (Pin 1) High (> 0.7Vcc) or open: Output (Pin 4, 5) active<br>Input (Pin 1) Low (< 0.3Vcc): Output disabled in high impedance              |
| <b>Enable/Disable Time</b>          | 2 ms Maximum - Enable; 200 ns Maximum - Disable   |

**Creating a Part Number**

**XO53PE-155M520-B25B3**



**OUTLINE DRAWING**

