

## LVDS CRYSTAL OSCILLATOR IN CERAMIC LCC PACKAGE - XO53LVDS Series

## **FEATURES**

- RoHS Compliant (Pb-Free), LVDS Compatible Signals
- Inherent Low Power and Low EMI Emission
- Very Low Phase Jitter, No Internal PLL Avoids Cascading PLL Problems
- Complimentary Output, Tri-state Enable/Disable Standard, 5x3.2x1.4 mm SMD package

## **SPECIFICATIONS**

Frequency Range 80 MHz to 270 MHz

Input Voltage (Vcc) B =  $+3.3 \text{ VDC} \pm 5\%$ ; C =  $+2.5 \text{ VDC} \pm 5\%$ 

Input Current 66 mA Maximum, depending on frequency and output load

Storage Temperature -55°C to 125°C

Overall Frequency Stability

Temperature Range Standard Stability

50 = ±50 ppm; 25 = ±25 ppm A = 0°C to 70°C; B = -40°C to 85°C 50A = ±50 ppm / 0°C to 70°C

Electric Option (Duty Cycle) 1 = Tristate 60/40%; 3 = Tristate 55/45%; 5 = Tristate 52.5/47.5%

0 = No tristate 60/40%; 2 = No tristate 55/45%; 4 = No tristate 52.5/47.5%

Output Load 100 Ohms across differential outputs (Offset 1.25V Typ)

**Logic "1" / Logic "0" Level** 1.43V Typ / 1.10V Typ

Rise/Fall Time (Tr/Tf) 0.7 ns Maximum at 20% to 80% Vp-p

Start-up time 5 ms Maximum

Phase Jitter (RMS, 1 Sigma) 0.3 ps Typical, 1 ps Maximum for fj = 12KHz to 20MHz

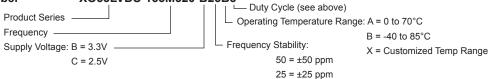
Phase Noise -120 dBc/Hz at 1KHz, -140 dBc/Hz at 10KHz, -145 dBc/Hz at 100KHz

**Tristate Function** Input (Pin 1) High (> 0.7Vcc) or open: Output (Pin 4, 5) active

Input (Pin 1) Low (< 0.3Vcc): Output disabled in high impedance

**Enable/Disable Time** 2 ms Maximum - Enable; 200 ns Maximum - Disable

Creating a Part Number XO53LVDS-155M520-B25B3



## **OUTLINE DRAWING**

