



SPREAD SPECTRUM HCMOS COMPATIBLE SMD CRYSTAL OSCILLATORS - SXO53 Series

FEATURES

- RoHS Compliant (Pb-Free), Industry Standard Pin-out Spacing
- Low EMI Output by Spread Spectrum Modulation, Tristate Option Available
- Applicable to Apparatus with Strict Specification of Low Electromagnetic Radiation
- Leadless Chip Carrier (LCC) Ultra Small 5x3.2x1.1 mm Package

SPECIFICATIONS

Frequency Range	10.000 MHz to 80.000 MHz
Input Voltage (Vcc)	B = +3.3VDC \pm 5%
Input Current	13 mA Maximum (F<28MHz); 15 mA Maximum (F \geq 28MHz)
Storage Temperature	-55°C to 125°C
Overall Frequency Stability	50 = \pm 50 ppm (Averaged frequency)
Temperature Range	G = -10°C to 70°C
Standard Stability	50G = \pm 50 ppm / -10°C to 70°C
Aging at 25°C	\pm 5 ppm first year Maximum
Electric Option (Symmetry)	1 = Tristate 60/40%; 3 = Tristate 55/45%
Spread Spectrum Range	Center Spread: A = \pm 0.5%; B = \pm 1%; C = \pm 2%
Modulation Frequency	20KHz - 35 KHz, depending on output frequency
Output Load	LVHCMOS, 15 pF load
Logic "1" / Logic "0" Level	0.9Vcc Minimum / 0.1Vcc Maximum
Rise/Fall Time (Tr/Tf)	5 ns Maximum, depending on frequency and output load
Start-up time	10 ms Maximum
Phase Jitter (Cycle to Cycle)	200 ps Max. (F<20MHz), 100 ps Max. (F \geq 20MHz) at 1Sigma
Tristate Function	Input (Pin 1) High (> 0.7Vcc) or open: Output (Pin 3) active Input (Pin 1) Low (< 0.3Vcc): Output disabled in high impedance
Output Disabled Time	100 ns Maximum
Output Enable Time	100 ns Maximum
Typical Part Number	SXO53-Frequency-Vcc-Freq. Stability-Temp. range-Duty cycle-Spread range
P/N Example	SXO53-25M000-B50G3B: Spread spectrum oscillator with \pm 1% spread range, 25MHz, +3.3VDC, \pm 50 ppm / -10°C to 70°C, Tristate output, Duty cycle: 55/45

OUTLINE DRAWING

