



7.0 x 5.08 x 1.8 mm

5.0 Vdc HCMOS/TTL COMPATIBLE CERAMIC SURFACE MOUNT CRYSTAL CLOCK OSCILLATORS ASL and ASL1

FEATURES:

- Leadless chip carrier (LCC), Low profile.
- HCMOS and TTL compatible.
- Tristate Enable/Disable function.
- Reflow capable.
- High density surface-mount applications.
- Available optional -40°C to 85°C extended temperature.
- Packaging: Tape and reel.
- Seam welding, 1.4 mm max.height.(ASL1)

APPLICATIONS:

- Provide clock signals for microprocessors, PC mainboards, Graphic cards.
- High output drive capability applications.

STANDARD SPECIFICATIONS

PARAMETERS	SPECIFICATIONS
Frequency Range (F_0)	1.00MHz - 125MHz
Operating Temperature (T_{OPR})	-10°C to +70°C (See Options)
Storage Temperature (T_{STO})	-55°C to +125°C
Frequency Stability ($\Delta F/F_0$)	±100ppm max. (See Options)
Supply Voltage (V_{dd})	5Vdc ±10%
Input Current (I_{dd})	25 mA max. for 1.0MHz < F < 35.0MHz 40 mA max. for 35.0MHz ≤ F ≤ 60.0MHz 60 mA max. for 60.0MHz < F ≤ 100MHz 80 mA max. for 100MHz < F ≤ 125MHz
Duty Cycle or Symmetry	40/60% max. @ 1/2 V_{dd} (See Options)
Rise and Fall Times (T_R / T_F)	10ns max. for 1.0MHz < F < 35.0MHz 5ns max. for 35.0MHz ≤ F < 100.0MHz 2.5ns max. for 100.0MHz ≤ F ≤ 125.0MHz
Output Load	10TTL or 50pF for F ≤ 70MHz 10TTL or 15pF for F > 70.0MHz
Output Voltage	0.9 * V_{dd} min. (V_{oh}); 0.4Vdc max. (V_{ol})
Start-up Time (T_{osc})	10ms max.
Tristate Function (V_{ih}) (V_{il})	"1" or Open: Oscillation ≥ 2.2V "0": Output disabled in high impedance (H_iZ) < 0.8V
Period jitter one sigma	±25ps max.

* Pin 1 has internal pull-up resistor which allows Pin 1 to be left floating (enable high)
A bypass capacitor 0.01 μ F is required from V_{dd} to Gnd. Reflow profile, see appendix E.
Test circuit, waveforms, please see appendix B. Marking, see appendix G.
Environmental and mechanical specifications, see appendix C. Group 2.
Application notes, see appendix A. Tape and Reel, see appendix H.(1,000 pcs./reel)

ORDERING OPTIONS

ASLX - Frequency - Temperature - Overall Freq. Stability - Duty Cycle - 50 - Packaging

XX.XXXXX MHz	-Y for ±10ppm max.* -J for ±20ppm max.* -R for ±25ppm max. -K for ±30ppm max. -H for ±35ppm max. -C for ±50ppm max.	50pF load output drive -S for 45/55% @ 1/2V _{dd} -S1 for 45/55% @ 1.4Vdc	-T (Tape & Reel)
Blank or 1	-I for -0°C to +50°C -D for -10°C to +60°C -E for -20°C to +70°C -F for -30°C to +70°C -N for -30°C to +85°C -L for -40°C to +85°C		

* Please contact us for availability.

Dimensions: Inches (mm)

PIN NO.	FUNCTION
1	Tristate E/D
2	GND / Case
3	Output
4	V _{dd}

