

5Vdc or 3.3Vdc • MINIATURE CERAMIC SURFACE MOUNT • HCMOS OR TTL

PROGRAMMABLE CLOCK OSCILLATORS

ASLP and ASVP

FEATURES:

- Wide range of frequency up to 125MHz using PLL technology.
- Quick delivery within one to five days for small quantities.
- Ultra miniature low profile SMD package.
- Reflow soldering.
- Tristate E/D or Stand-By function.
- Hermetically seam welded.

APPLICATIONS:

- Clocks for a wide range of applications.

STANDARD SPECIFICATIONS

PARAMETERS	ASLP	ASLPT	ASVP
Frequency Range (F_0)	1.00MHz - 125MHz		1.00MHz - 106.25MHz
Operating Temperature (T_{OPR})	-20°C to +70°C (See Options)		
Storage Temperature (T_{STO})	-55°C to +125°C		
Frequency Stability ($\Delta F / F_0$)	± 50 ppm max. (See Options)		
Supply Voltage (V_{DD})	5.0Vdc $\pm 10\%$		3.3Vdc $\pm 10\%$
Input Current (I_{DD})	45mA max.		25mA max.
Duty Cycle or Symmetry	45/55% max.at 1/2 VDD	45/55% max.at 1.4 VDC	45/55% max.at 1/2 VDD
Rise and Fall Times (T_R / T_F)	4ns max.		
Output Load	25pF max.	5TTL	15pF max.
Output Voltage (V_{OH})	0.9 * V_{DD} min.	2.4V min.	0.7 * V_{DD} min.
(V_{OL})	0.4V max.	0.4V max.	0.2 * V_{DD} max.
Start-up Time (T_{OSC})	10ms max.		
Tristate (OE) Function	V_{IH} : 2.0V min. Oscillation V_{IL} : 0.8V max. Hi Impedance		V_{IH} : 0.7* V_{DD} min. V_{IH} : 0.2* V_{DD} max.
Disable current OE (I_{DIS})	30mA max.		15mA max.
Stand - By current (option B)(I_{STB})	50 μ A max.		20 μ A max.
Jitter Peak to peak	± 250 ps max. for $F \leq 40$ MHz, ± 90 ps typ. ± 100 ps max. for $F > 40$ MHz, ± 50 ps typ.		± 250 ps max. for $F \leq 40$ MHz, ± 90 ps typ. ± 100 ps max. for $F > 40$ MHz, ± 50 ps typ.
RMS One sigma	± 50 ps max. for $F \leq 40$ MHz, ± 25 ps typ. ± 30 ps max. for $F > 40$ MHz, ± 15 ps typ.		± 50 ps max. for $F \leq 40$ MHz, ± 25 ps typ. ± 40 ps max. for $F > 40$ MHz, ± 20 ps typ.

* Pin 1 has internal pull-up resistor which allow Pin 1 to be left floating (enable high).

Connect a By-Pass capacitor 0.01 μ F between Vdd and GND.

Environmental and mechanical specifications see appendix C. Group 2.

Test circuit, waveforms,see appendix B. Reflow profile, see appendix E.

Tape and Reel, see appendix H.(1,000 pcs./reel).

ORDERING OPTIONS

ASXPX	- Frequency	- Temperature	- Overall Frequency Stability	- Stand By	- Packaging
L or V	XXX.XXX MHz	-F for -30°C to +70°C -N for -30°C to +85°C -L for -40°C to +85°C	-J for ± 20 ppm max.* -R for ± 25 ppm max.* -K for ± 30 ppm max. -H for ± 35 ppm max.	-B	T for Tape and Reel
T or Blank					

* Standard temperature only.
Please call us for other tighter spec.

MARKING w/o OPTIONS:

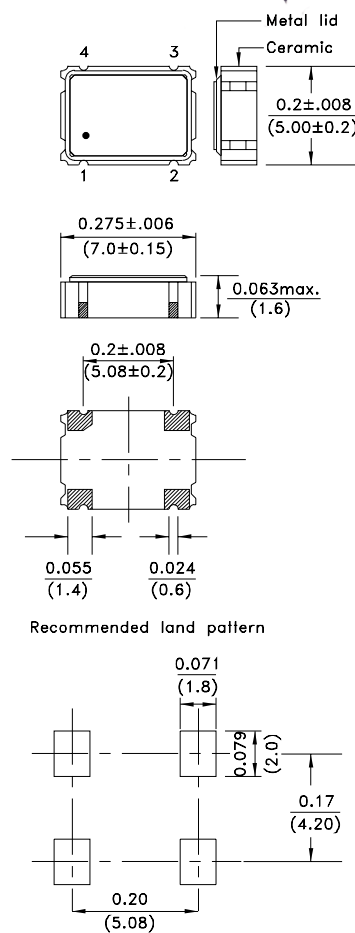
- ALPX (X.XX frequency)
- 042104 (Six digit lot and blank date code,
Ex: ALP80.0, ALP4.00)

MARKING w/ OPTIONS:

- AX.XXRB or LB (X.XX frequency)
- 042104 (R for stability. or L temp. & B for stand-by
Six digit lot and blank date code, Ex: A125LB, A66.6B, A27.0R)



1 to 5
Day Lead
Time



Dimensions: Inches (mm)

Pin	Function
1	OE or PD
2	GND
3	Output
4	Vdd