

CMOS/TTL SMD PROGRAMMABLE CRYSTAL OSCILLATOR



3.2 X 2.5 X 1.05 mm



ASEP SERIES

FEATURES:

- Wide frequency range from 1MHz up to 125MHz
- Miniature size for high density applications
- -40 + 85C industrial operating temperature available

APPLICATIONS:

- Precision clock frequency for a wide range of emerging technology applications.

For Small Quantities,
Delivery Time
is 1-5 days

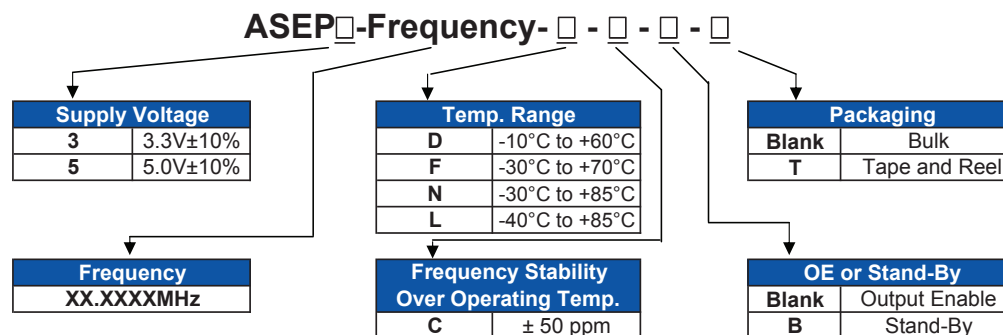
STANDARD SPECIFICATIONS:

PARAMETERS

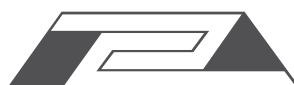
ABRACON P/N		ASEP Series			
Characteristics		Unit	Minimum	Typical	Maximum
Frequency Range		MHz	1	--	125
Operating Temp. Range * (See Options)		°C	-20	--	70
Storage Temp. Range * (See Options)		°C	-55	--	125
Freq. Stability Over Operating Temp.* (See Options)		ppm	-100	--	100
Supply Voltage (See options)	ASEP3	VDC	2.97	3.3	3.63
	ASEP5	VDC	4.5	5.0	5.5
Supply Current	ASEP3	mA	--	--	25
	ASEP5	mA	--	--	45
Disable Current (See options)	ASEP3	mA	--	--	15
	ASEP5	mA	--	--	30
Stand-by Current (See options)		uA	--	--	50
Output Load	CMOS	15pF (ASEP3 and ASEP5)			
	TTL	5TTL max. (ASEP5 only)			
Symmetry	CMOS (1/2Vdd)	%	40	50	60
	TTL (1.4V)	%	40	50	60
Rise Time	CMOS (20%Vdd<=>80%Vdd)	nSec	--	--	4
	TTL(0.4V<=>2.4V)	nSec	--	--	4
Fall Time	CMOS (20%Vdd<=>80%Vdd)	nSec	--	--	4
	TTL (0.4V<=>2.4V)	nSec	--	--	4
Output Voltage	CMOS	VOH	--	--	0.9*Vdd min.
		VOL	0.1*Vdd max.	--	--
	TTL	VOH	--	--	0.9*Vdd min.
		VOL	0.4*Vdd max.	--	--
Input (OE) Voltage	ASEP3 (CMOS)	VIH	--	--	0.7*Vdd min.
		VIL	0.2*Vdd max.	--	--
	ASEP5 (CMOS and TTL)	VIH	--	--	2.0V min.
		VIL	0.8V max.	--	--
Start-Up time		ms	--	--	10
Output Disable Time		ns	--	--	100
Output Enable Time (OE)		ns	--	--	100
Output Enable Time (ST)		ms	--	--	10
Aging (First Year)		ppm	-5	--	5

OPTIONS & PART IDENTIFICATION:

(Left blank if standard)



Please contact ABRACON for tighter stability



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ASEP
3.2 X 2.5 X 1.05 mm

ASEP SERIES



OUTLINE DRAWING:

Top view: Dimensions 0.126±.008 (3.2±0.2) and 0.05 (1.2). Pin locations 1, 2, 3, 4.

Bottom view: Dimensions 0.026 (0.65), 0.035 (0.9), and 0.05 (1.2).

Side view: Dimensions 0.41 max. ±.006 (1.05±0.15) and 0.1±.008 (2.5±0.2). Labels: Metal lid, Ceramic.

Recommended land pattern: Dimensions 0.055 (1.4), 0.05 (1.2), 0.075 (1.9), and 0.1 (2.4).

Dimensions: mm

PIN	FUNCTION
1	OE or Stand-By
2	GND
3	Output
4	Vdd

Note: It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

TAPE & REEL:

Carrier Tape Dimensions: Feeding (PULL) DIRECTION, 0.25±0.05, 1.75±0.1, 2.0±0.05, 4.0±0.1, 3.5±0.1, 8.0±0.2, 1.4±0.1, 5° MAX, 3.4±0.1, Pin 1, 2.7±0.1, 1.0, 2.5, 11±0.5, 120°, 2.0, 8.0±0.2, 11.5±0.2, 2.0, 60.2, 178±1, 21.0±1, 13.0±0.5.

Reel Dimensions: End of Tape (200mm min.), Blanket Pocket (200mm min.), Tape (200mm min.).

Dimensions: mm

ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



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