

# HCMOS/TTL SMD PROGRAMMABLE CRYSTAL OSCILLATOR



## ASEP SERIES



**RoHS**  
Compliant

3.2 X 2.5 X 1.05 mm

### 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.

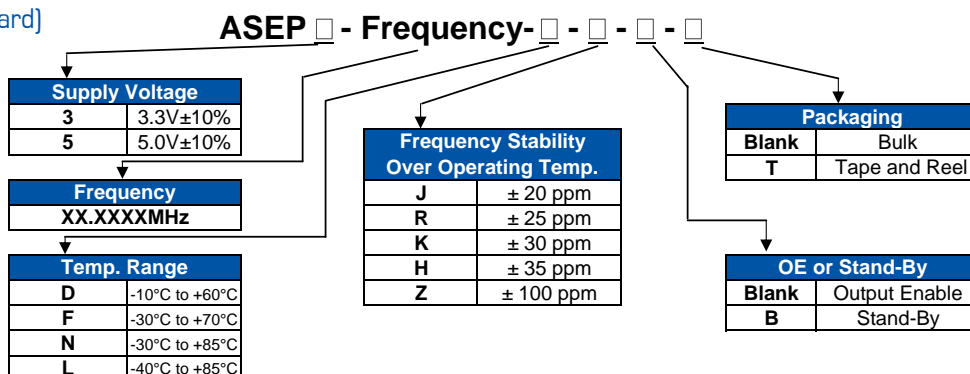
For Small  
Quantities,  
Delivery Time  
is 1-5 days

### STANDARD SPECIFICATIONS:

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

### OPTIONS & PART IDENTIFICATION:

(Left blank if standard)



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



**ABRACON**  
CORPORATION

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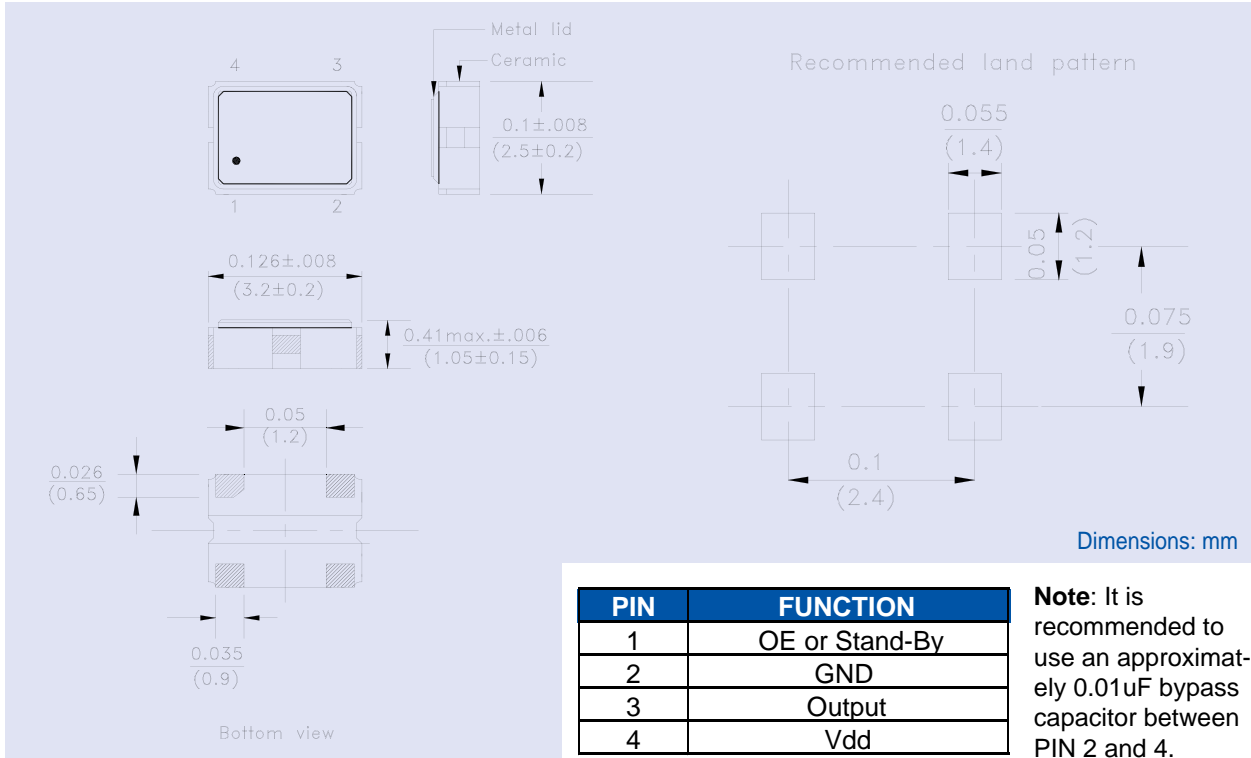


3.2 X 2.5 X 1.05 mm

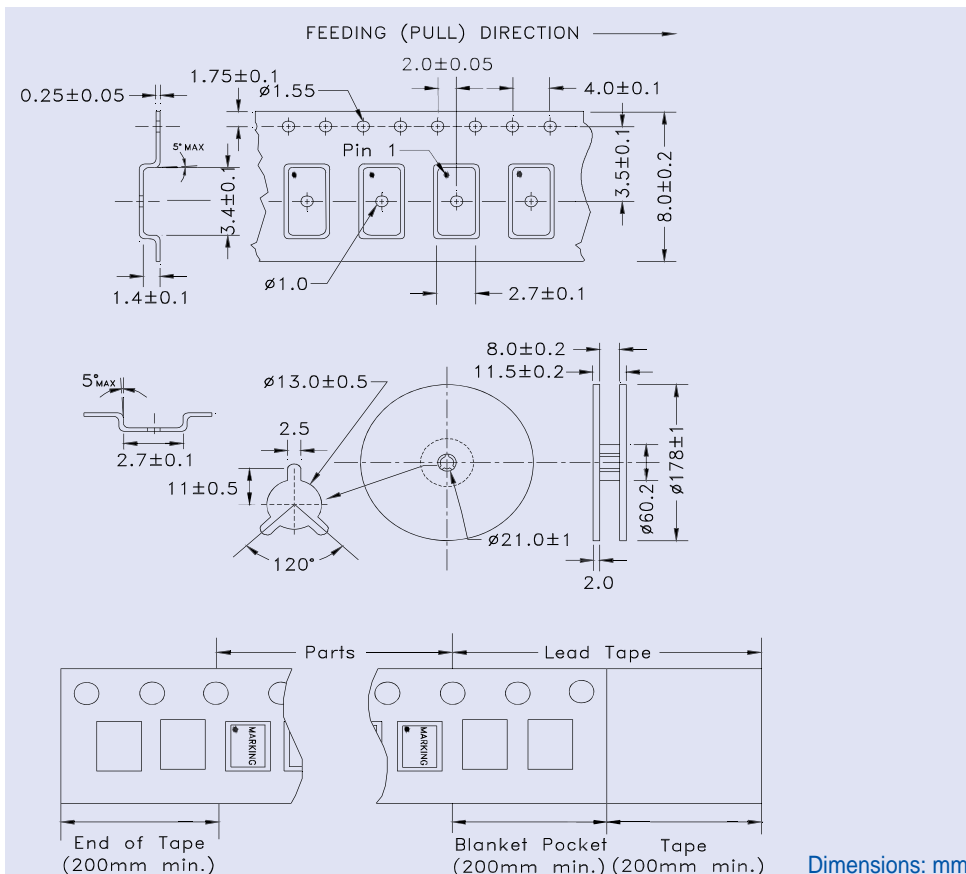
ASEP SERIES

**Pb** RoHS Compliant

## OUTLINE DRAWING:



## TAPE & REEL:



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