



ECN/PCN No.: 3806

For Manufacturer			
<b>Product Description:</b> Tight Stability SMD Clock Oscillator	<b>Abracon Part Number / Part Series:</b> ASET Series	<input type="checkbox"/> Documentation only <input type="checkbox"/> ECN <input checked="" type="checkbox"/> EOL	<input checked="" type="checkbox"/> Series <input type="checkbox"/> Part Number
<b>Affected Revision:</b> L	<b>New Revision:</b> EOL	<b>Application:</b>	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
<b>Prior to Change:</b> ACTIVE <a href="https://abracon.com/Oscillators/ASET.pdf">https://abracon.com/Oscillators/ASET.pdf</a>			
<b>After Change:</b> EOL			
<b>Cause/Reason for Change:</b> Production will be discontinued due to material constraint issues.			
Change Plan			
<b>Effective Date:</b> 4/27/21	<b>Additional Remarks:</b>		
<b>Change Declaration:</b>			
<b>Issued Date:</b> 4/27/21	<b>Issued By:</b> Stephanie Lopez	<b>Issued Department:</b> Engineering	
<b>Approval:</b> Thomas Culhane Engineering Director	<b>Approval:</b> Reuben Quintanilla Quality Director	<b>Approval:</b> Ying Huang Purchasing Director	
For Abracon EOL only			
<b>Last Time Buy (if applicable):</b> None	<b>Alternate Part Number / Part Series:</b> None		
<b>Additional Approval:</b>	<b>Additional Approval:</b>	<b>Additional Approval:</b>	
Customer Approval (If Applicable)			
<b>Qualification Status:</b> <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
<b>Customer Part Number:</b>		<b>Customer Project:</b>	
<b>Company Name:</b>	<b>Company Representative:</b>	<b>Representative Signature:</b>	
<b>Customer Remarks:</b>			

# TIGHT STABILITY INDUSTRIAL GRADE CRYSTAL OSCILLATOR



3.2 x 2.5 x 1.2mm

## ASET SERIES



**ESD Sensitive**



**RoHS/RoHS II compliant**

**Moisture Sensitivity Level (MSL) – This product is Hermetically Sealed and not Moisture Sensitive - MSL = N/A: Not Applicable**

### FEATURES:

- Highly reliable seam-sealed package
- Low current consumption 7mA
- Low phase noise and jitter
- Industrial grade tight temperature stability available ( $\pm 10\text{ppm} / -40$  to  $+85^\circ\text{C}$ )
- Fast start-up time 0.2ms typical
- CMOS output with Tri-state function

### APPLICATIONS:

- Home networking by AC socket
- Wireless LAN
- Mobile communications
- PLC modem
- WiMax

### STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	4		54	MHz	
Standard Frequencies	5, 10, 12, 16, 20, 24, 26, 27, 32, 40, 44			MHz	
Operating Temperature	-40		+85	$^\circ\text{C}$	
Storage Temperature	-40		+85	$^\circ\text{C}$	
Overall Frequency Stability*	-15		+15	ppm	See options
Supply Voltage (Vdd)	+2.7	3.0	+3.3	V	See options
Supply Current (Idd)			7.0	mA	
Stand-by Current			10	$\mu\text{A}$	
Symmetry	45		55	%	@ 1/2Vdd
Rise and Fall Time (Tr/Tf)			5.0	ns	10%Vdd-90%Vdd
Output Load			15	pF	CMOS
Output Voltage (VOH)	0.9* Vdd			V	
Output Voltage (VOL)			0.1* Vdd	V	
Start-up Time		0.2	3.0	ms	
RMS Jitter		3.0		ps	
Tri-state function	"1" ( $V_{IH} \geq 0.7 * V_{DD}$ ) or Open: Oscillation "0" ( $V_{IH} < 0.3 * V_{DD}$ ): Hi Z				
Phase Noise (@10kHz offset)		-143		dBc/Hz	
Aging@+25 $^\circ\text{C}$	-2		+2	ppm	First year
	-7		+7		10 years

\* Overall frequency stability includes initial tolerance @ +25 $^\circ\text{C}$ , and temperature stability

### OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ASET-  -  MHz -  -

#### Supply Voltage

Blank: 3.0 $\pm 10\%$   
A: 2.7 $\pm 10\%$   
B: 3.3 $\pm 10\%$   
C: 2.8 $\pm 10\%$   
D: 2.5 $\pm 10\%$

#### Frequency in MHz

Please specify the frequency in MHz.  
e.g. 24.000MHz

#### Overall Freq. Stability

Blank:  $\pm 15\text{ppm}$   
Y:  $\pm 10\text{ppm}$   
R7\*:  $\pm 7\text{ppm}$   
R5\*:  $\pm 5\text{ppm}$

#### Packaging

Blank: Bulk  
T: Tape & Reel

\*Contact Abracon for availability



# TIGHT STABILITY INDUSTRIAL GRADE CRYSTAL OSCILLATOR

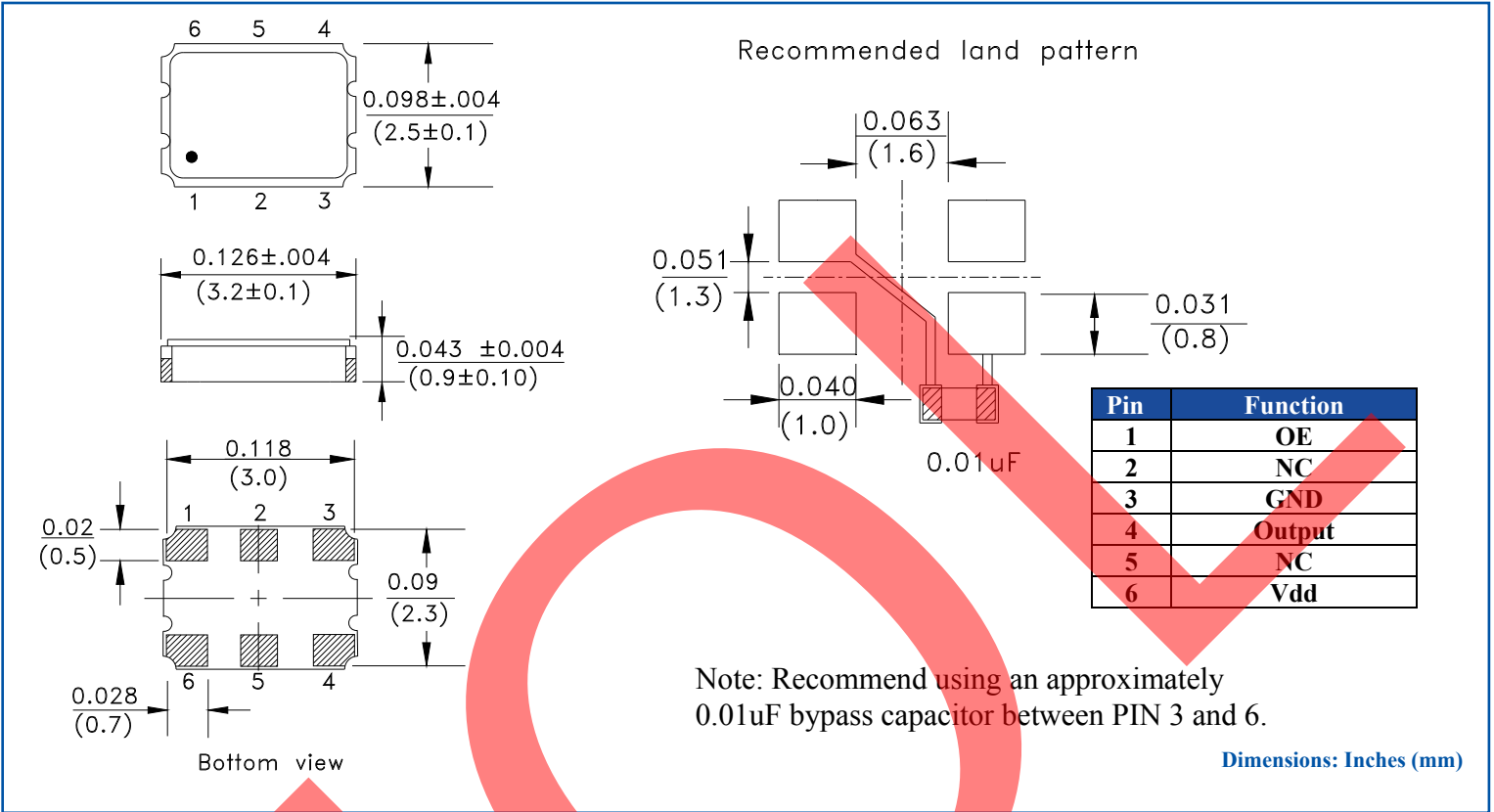


3.2 x 2.5 x 1.2mm

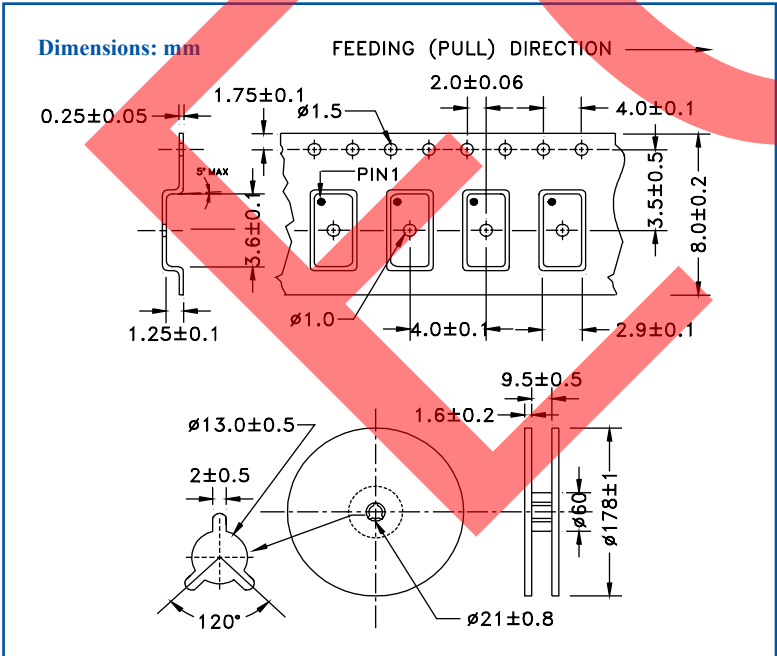
## ASET SERIES

**Pb** RoHS/RoHS II compliant

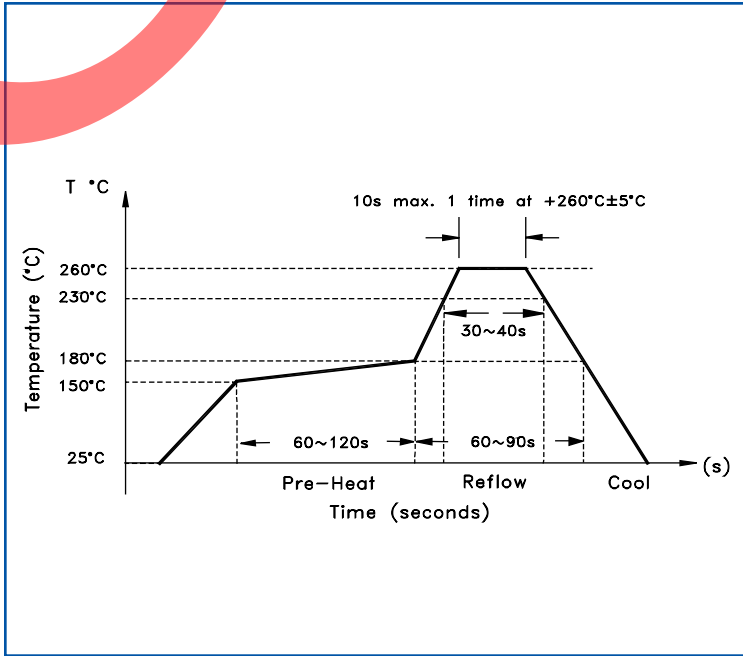
### OUTLINE DRAWING:



### TAPE & REEL: T= tape and reel (1,000 pcs/reel)



### REFLOW PROFILE



Need a test socket for the ASET Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, [click here](#). P/N: AXS-3225-04-05

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ABRACON IS  
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