

ECN/PCN No.: 3806

For Manufacturer			
Product Description: Tight Stability SMD Clock Oscillator	Abracon Part Number / Part Series: 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
Affected Revision: L	New Revision: EOL	Application:	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
Prior to Change: ACTIVE https://abracon.com/Oscillators/ASET.pdf			
After Change: EOL			
Cause/Reason for Change: Production will be discontinued due to material constraint issues.			
Change Plan			
Effective Date: 4/27/21	Additional Remarks:		
Change Declaration:			
Issued Date: 4/27/21	Issued By: Stephanie Lopez	Issued Department: Engineering	
Approval: Thomas Culhane Engineering Director	Approval: Reuben Quintanilla Quality Director	Approval: Ying Huang Purchasing Director	
For Abracon EOL only			
Last Time Buy (if applicable): None	Alternate Part Number / Part Series: None		
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: <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>			
Customer Part Number:		Customer Project:	
Company Name:	Company Representative:	Representative Signature:	
Customer Remarks:			

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	μA	
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

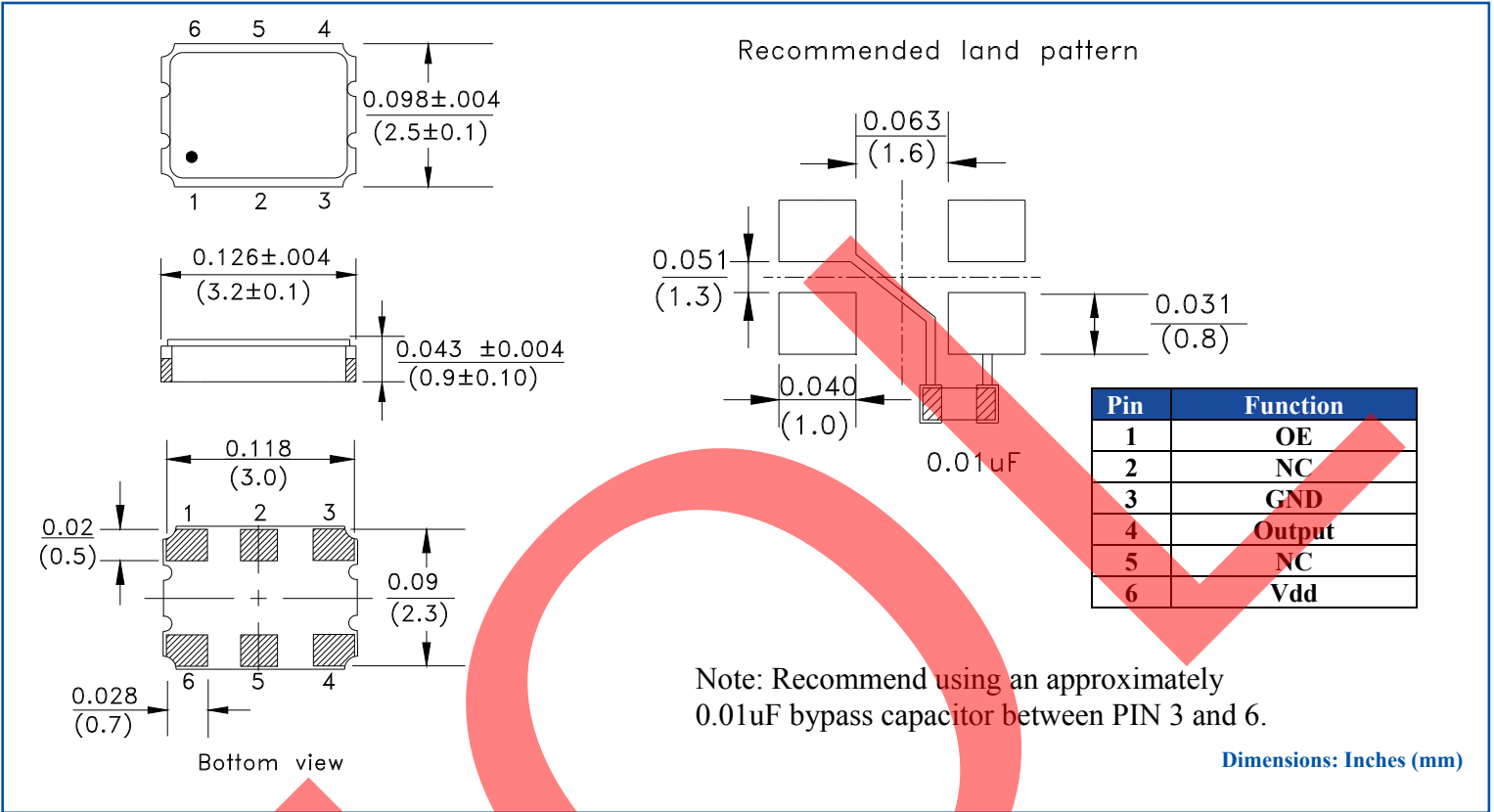


3.2 x 2.5 x 1.2mm

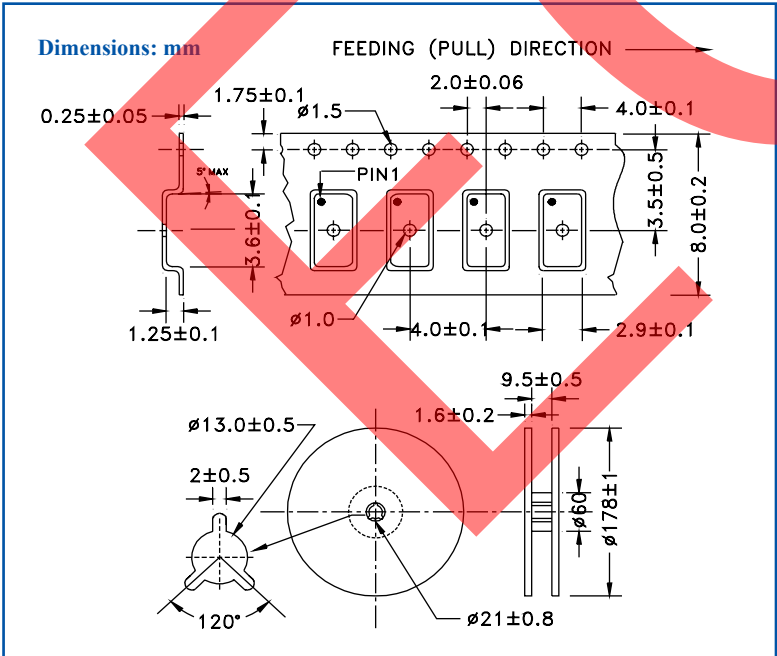
ASET SERIES

Pb RoHS/RoHS II compliant

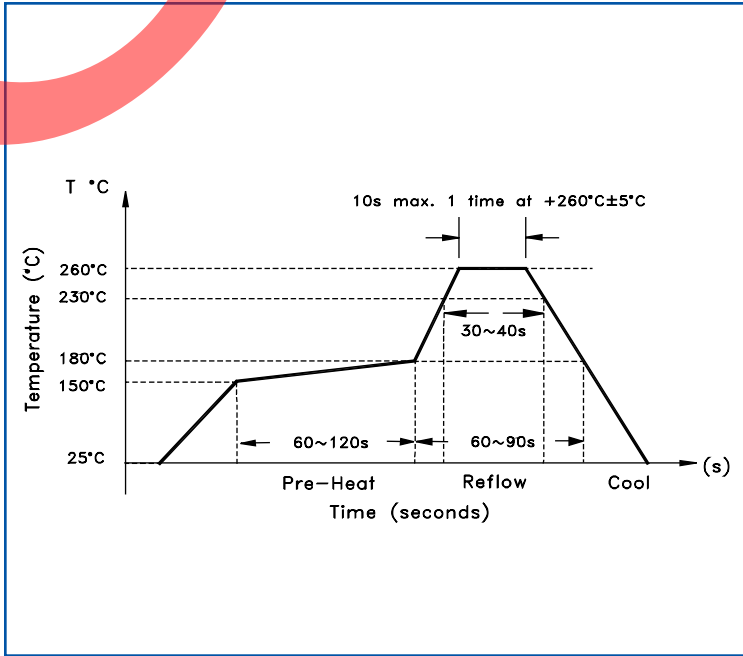
OUTLINE DRAWING:



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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