Engineering/Process Change Notice

ECN/PCN No.: 3807

For Manufacturer		
Product Description: Tight Stability SMD Clock Oscillator	**Abracon Part Number / Part Series:** ASFLT Series	☐ Documentation only ☒ Series ☐ ECN ☐ Part Number ☒ EOL
Affected Revision: K	**New Revision:** EOL	**Application:** ☐ Safety ☒ Non-Safety
Prior to Change: ACTIVE https://abracon.com/Oscillators/ASFLT.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: ☐ Approved ☐ Not accepted *Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.*		
Customer Part Number:	**Customer Project:**	
Company Name:	**Company Representative:**	**Representative Signature:**
Customer Remarks:		

TIGHT STABILITY INDUSTRIAL GRADE CRYSTAL OSCILLATOR

5.0 x 3.2 x 1.05mm

ASFLT 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
- Low phase noise and jitter
- Industrial grade tight temperature stability (±5.0ppm / -40 to +85°C)
- Fast start-up time
- 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, 16.384, 19.44, 20, 24, 26, 32, 40, 44			MHz	
Operating Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°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	uA	
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 (Stand-by)	Pin #1: "1"(VIH≥ 0.7*Vdd) or Open: Oscillation Pin #1: "0" (VIL<0.3*Vdd): (Hi-Z)				
Phase Noise		-143		dBc/Hz	@10kHz offset
Aging@+25°C	-2		+2	ppm	First year
	-7		+7		10 years

OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ASFLT - ☐ - ☐☐☐☐☐☐ MHz - ☐ - ☐

Supply Voltage
Blank: 3.0±10%
A: 2.7±10%
B: 3.3±10%
C: 2.8±10%
D: 2.5±10%

Frequency in MHz
Please specify the frequency in MHz. e.g. 16.384MHz

Overall Freq. Stability
Blank: ±15ppm
Y: ±10ppm
R7*: ±7ppm
R5*: ±5ppm

*Contact Abracon for availability

Packaging
Blank: Bulk
T: Tape & Reel

TIGHT STABILITY INDUSTRIAL GRADE CRYSTAL OSCILLATOR

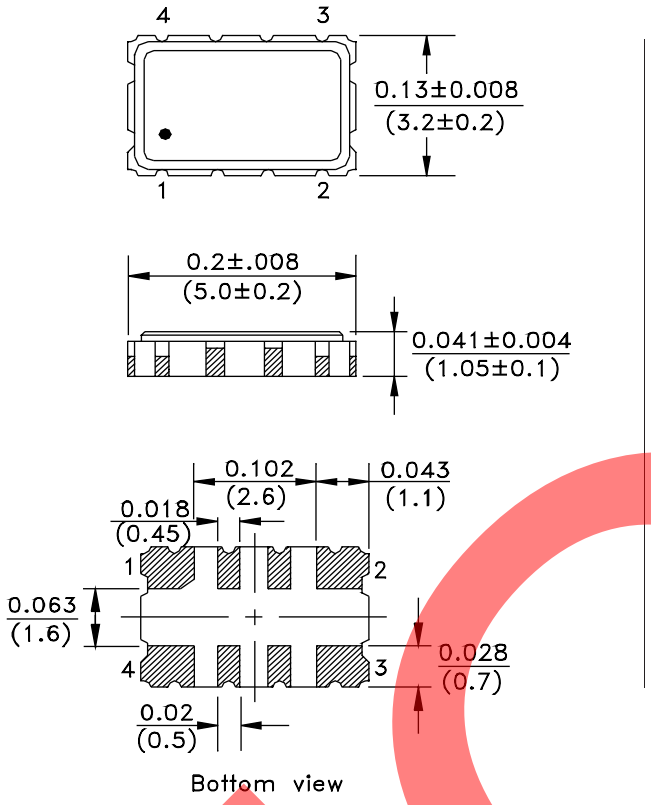
ASFLT SERIES

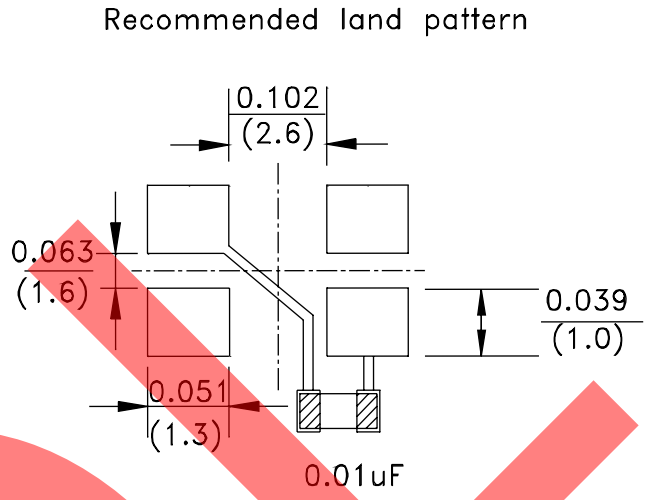
ESD Sensitive

Pb RoHS/RoHS II Compliant

5.0 x 3.2 x 1.05mm

OUTLINE DRAWING:





Resist layer is required on the path for the by-pass capacitor.

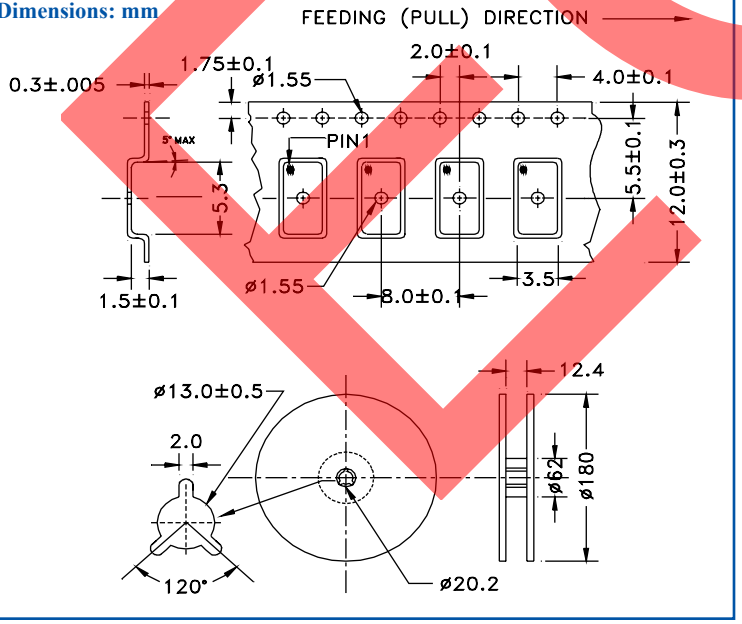
Note : It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

Dimensions: Inches (mm)

PIN	FUNCTION
1	CE
2	GND
3	Output
4	VDD

TAPE & REEL: (1,000 pcs/reel)

Dimensions: mm



REFLOW PROFILE: