

ABRACON, LLC				
ENGINEERING/PROCESS CHANGE NOTIFICATION FORM				

**ABRACON ENGINEERING ORIGINATOR:** 

Associate Engineer

NOTIFICATION DATE:

<u>05/14/2018</u>

IMPLEMENTATION DATE: 05/14/2018

SCD/DRAWING AFFECTED: <u>ABLS3 Series</u> <u>HC49/US (AT49) LOW PROFILE SMD</u> <u>MICROPROCESSOR CRYSTAL</u> REV: <u>K</u>

NEW	REV:	L

#### EFFECTIVITY DATE: 05/14/2018

ECO# 3303

# **REASON FOR CHANGE:**

Electrical specification and packaging adjustments.					
DETAILS OF SPECIFICATION CHANGE:	APPLICATION INFORMATION				
Electrical Specifications	Safety	Non Safety	Application:		
1) Removed frequencies from offering:	(Check one)				
Rev K (previous): -Frequency Range: 3.579545MHz – 70.00000MHz		n			
-Frequency Range: 5.579545MHz - 70.00000MHz		О			
Rev L (revised):		<u> </u>			
-Frequency Range: 6.00000MHz – 70.00000MHz	DISPOSITION OFCURRENT STOCK				
-Frequencies Removed from Abracon's offering:	□ Scrap □ Transfer to	o.			
3.579545MHz – 5.999999MHz	Use as is				
2) Removed operating temperature range options	□ Return to	vendor			
from offering:					
Rev K (previous):					
-Included below operating temp range options:					
A: -10°C ~ +60°C					
B: -20°C ~ +70°C					
C: -30°C ~ +70°C					
N: -30°C ~ +85°C					
D: -40°C ~ +85°C					
J: -40°C ~ +105°C K: -40°C ~ +125°C					
L: -55°C ~ +125°C					



Rev L (revised): -Includes below operating temp range options: -Options "J, K, & L" have been removed from Abracon's offering:

A:  $-10^{\circ}C \sim +60^{\circ}C$ B:  $-20^{\circ}C \sim +70^{\circ}C$ C:  $-30^{\circ}C \sim +70^{\circ}C$ N:  $-30^{\circ}C \sim +85^{\circ}C$ D:  $-40^{\circ}C \sim +85^{\circ}C$ J:  $-40^{\circ}C \sim +105^{\circ}C$ K:  $-40^{\circ}C \sim +125^{\circ}C$ L:  $-55^{\circ}C \sim +125^{\circ}C$ 

# **Packaging**

# 1) Removed height option:

Rev K (previous): -Included below 2 statements regarding height:

- 2.5mm max for frequency 6MHz or higher
- 2.6mm max for frequency lower than 6MHz

### Rev L (revised):

-Removed both statements above. Moving forward, the height will always be 2.5mm max.

## **Recommended Alternative**

Suggested replacements for ABLS3 Series (includes options below 6.000MHz at all operating temp. ranges up to  $-55^{\circ}C \sim +125^{\circ}C$ ):

- Abracon ABLS2 Series
- Difference between ABLS2 series compared to ABLS3 series: Height
  - ABLS3 Rev K (previous) height:
    - Below 6MHz: 2.6mm max.
    - Above 6MHz: 2.5mm max.
  - ABLS2 height:
    - All frequencies: 3.3mm max.
  - ABLS2 (recommended replacement) has increased height specification compared to ABLS3 series: 3.3mm > 2.6mm and/or 2.5mm



ABRACON INTERNAL APPROVAL:				
APPROVAL (PRES)	DATE 05/14/2018			
GLOBAL QUOTING/PRICING MGR	DATE 05/14/2018			
ENGINEERING VP	DATE 05/14/2018			
PURCHASING MGR	DATE 05/14/2018			
SALES VP	DATE 05/14/2018			
QUALITY & PROCESS IMPROVEMENT MGR:DATE 05/14/2018				
CUSTOMER APPROVAL (If Applicable)				
ENGINEERING: NAME:	TITLE:	DATE:		
BUYER/PURCHASING: NAME:	TITLE:	DATE:		