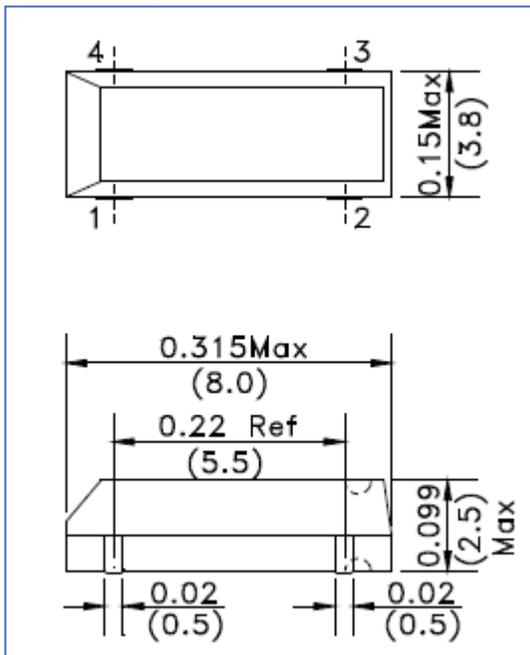


ECN/PCN No.: 3455

For Manufacturer		
Product Description: Low Frequency SMD Crystal		Abracon Part Number / Part Series: ABS25
Affected Revision: U	New Revision: V	Application
		<input checked="" type="checkbox"/> Series
		<input type="checkbox"/> Part Number
		<input type="checkbox"/> Safety
		<input checked="" type="checkbox"/> Non-Safety

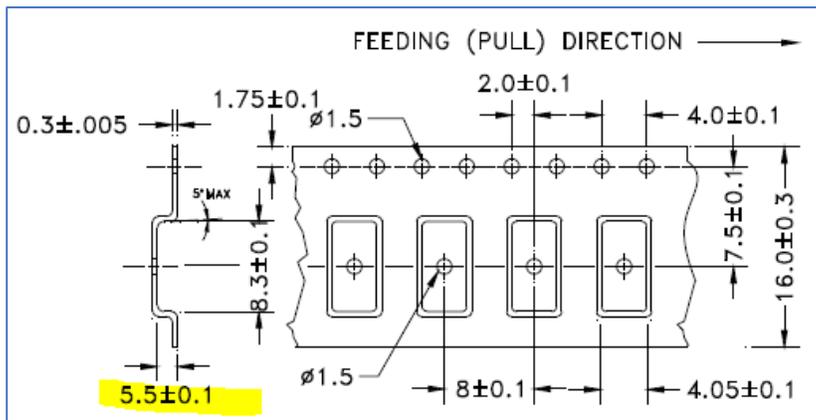
Prior to Change:

1. ROHS Statement
 - a. Pb in High Temperature Solder (exempt per RoHS 2002/95/EC Annex (7))
2. Electrical performance
 - a. Frequency Coefficient (β):
 - i. Min = -0.040 ppm/T²
 - ii. Typ = -0.034 ppm/T²
 - iii. Max = -0.028 ppm/T²
3. Mechanical Dimensions (millimeters)
 - a. Top view; width dimension = 3.8 mm MAX
 - b. Top view; length dimension = 8.0 MAX
 - c. Side view; height dimension = 2.5 MAX



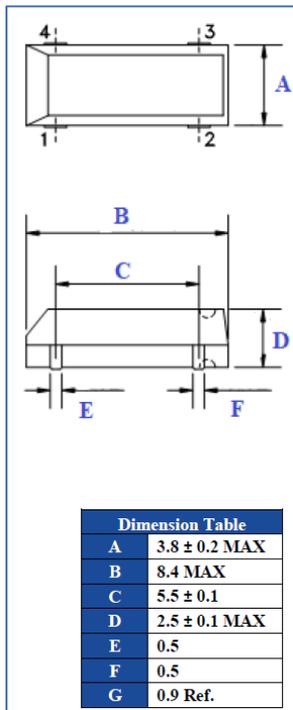
d.

4. Tape Packaging Dimension (millimeters)
 - a. Depth of part-insert dimension = 5.5 ± 0.1

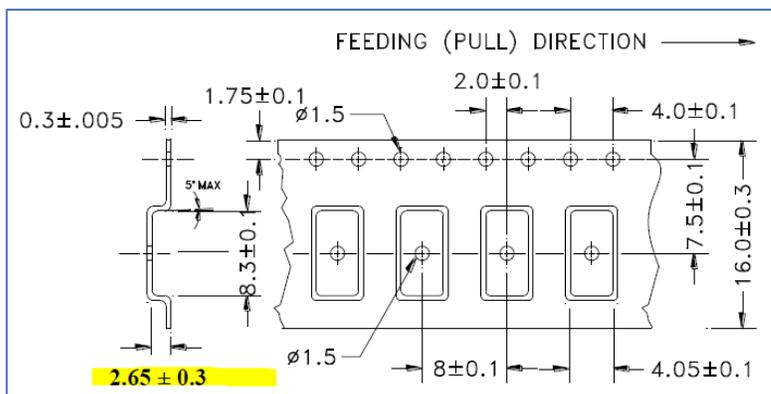


After Change:

1. ROHS Statement
 - a. Pb in high temperature solder (exempt 7(a) per 2015/863/EU Annex)
2. Electrical performance
 - a. Frequency Coefficient (β):
 - i. Typ = -0.035 ± 0.01 ppm/ $^{\circ}\text{C}^2$
3. Mechanical Dimensions (millimeters)
 - a. Top view; width dimension = 3.8 ± 0.2 MAX (increase)
 - b. Top view; length dimension = 8.4 MAX (increase)
 - c. Side view; height dimension = 2.5 ± 0.1 MAX (increase)



4. Reel Packaging Dimension (millimeters)
 - a. Depth of part-insert dimension = 2.65 ± 0.3 (original dimension on the datasheet was a typing error)



Cause/Reason for Change:

1. Standard review and upgrade of product series.
2. ROHS compliance statement updated.
3. Due to raw material availability, part size/dimension adjustments were implemented.
4. Typing error fixed for one tape-packaging dimension.

Change Plan	Effective Date: 9/23/2019	Additional Remarks: N/A
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Change Declaration:
These changes do not negatively impact electrical performance of this series. The mechanical dimension changes of the part slightly increased.

Engineering/Process Change Notice

Issued Date: 9/23/2019	Issued By: Brooke Cushman	Issued Department: Engineering
Approval: Syed Raza Engineering VP	Approval: Reuben Quintanilla Quality Manager	Approval: Ying Huang Purchasing Director
For Abracon EOL only		
Last Time Buy (if applicable): N/A	Alternate Part Number / Part Series: N/A	
Additional Approval: N/A	Additional Approval: N/A	Additional Approval: N/A
Customer Approval (If Applicable)		
Qualification Status: <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted Note: It is considered approved if there is no feedback from customer 1 month after ECN/PCN is released		
Customer Part Number:		Customer Project:
Company Name:	Company Representative:	Representative Signature:
Customer Remarks:		