

# Engineering/Process Change Notice

#### ECN/PCN No.: R0049

| For Manufacturer   |                            |                                    |                                   |                           |  |  |  |  |  |
|--|----------------------------|------------------------------------|-----------------------------------|---------------------------|--|--|--|--|--|
| <b>Product Description:</b><br>SMD 303.825MHz SAW Filter                   | Abracon Part Numb<br>AFS30 | <b>er / Part Series:</b><br>3.825E | Documentation only ECN EOL        | □ Series<br>⊠ Part Number |  |  |  |  |  |
| Affected Revision:   | New Revision:              | DL                                 | Application:                      | □ Safety<br>⊠ Non-Safety  |  |  |  |  |  |
| Prior to Change:   | 1                          |                                    | 1                                 |                           |  |  |  |  |  |
| N/A  |                            |                                    |                                   |                           |  |  |  |  |  |
| After Change:  |                            |                                    |                                   |                           |  |  |  |  |  |
| EOL  |                            |                                    |                                   |                           |  |  |  |  |  |
| Cause/Reason for Change:   |                            |                                    |                                   |                           |  |  |  |  |  |
| Due to low demand this part is discontinued.                               |                            |                                    |                                   |                           |  |  |  |  |  |
|  |                            | ge Plan                            |                                   |                           |  |  |  |  |  |
| Effective Date:<br>06/28/2021  | Additional Remarks:        |                                    |                                   |                           |  |  |  |  |  |
| Change Declaration:<br>EOL   | N/A                        |                                    |                                   |                           |  |  |  |  |  |
| Issued Date:   | Issued By:                 |                                    | Issued Department:                |                           |  |  |  |  |  |
| 06/28/2021   | Nicholas El-Takach         |                                    | Engineering                       |                           |  |  |  |  |  |
| Approval:  | Approval:                  |                                    | Approval:                         |                           |  |  |  |  |  |
| <i>Syed Raza</i><br>Engineering VP   | Reuben Quintanilla         |                                    | Ying Huang<br>Purchasing Director |                           |  |  |  |  |  |
| Engineering VP Quality Director Purchasing Director   For Abracon EOL only |                            |                                    |                                   |                           |  |  |  |  |  |
| Last Time Buy (if applicable):   |                            | Alternate Part Num                 | per / Part Series:                |                           |  |  |  |  |  |
| No last time buy.  |                            |                                    |                                   |                           |  |  |  |  |  |
| Additional Approval:   | Additional Approval:       |                                    | Additional Approval:              |                           |  |  |  |  |  |
|  | Customer Appro             | oval (If Applicable)               |                                   |                           |  |  |  |  |  |
| Qualification Status:  | □ Approved                 | □ Not accepted                     |                                   |                           |  |  |  |  |  |
| Note: It is considered approved if there is n                              | o feedback from the c      | ustomer 1 month afte               | r ECN/PCN is released.            |                           |  |  |  |  |  |
| Customer Part Number: Customer Project                                     |                            | Customer Project:                  |                                   |                           |  |  |  |  |  |
| Company Name:  | Company Representative:    |                                    | Representative Signature:         |                           |  |  |  |  |  |
| Customer Remarks:  |                            |                                    |                                   |                           |  |  |  |  |  |
|  |                            |                                    |                                   |                           |  |  |  |  |  |

Form #7020 | Rev. G | Effective: 02/22/2021 |

Page **1** of **1** 













## AFS303.825E

## Moisture Sensitivity Level – MSL 1

### **FEATURES:**

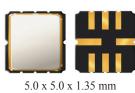
- Low Insertion Loss 3.0dB typical
- Compact SMD package 5.0 x 5.0 x 1.35mm
- Suitable for RoHS compliant reflow

### **STANDARD SPECIFICATIONS:**

### **Maximum Ratings**

| Item                        | Value                              |  |  |
|-----------------------------|------------------------------------|--|--|
| Operating Temperature Range | $-10^{\circ}$ C to $+60^{\circ}$ C |  |  |
| Storage Temperature Range   | $-40^{\circ}$ C to $+85^{\circ}$ C |  |  |
| DC Voltage                  | 12V                                |  |  |
| Input Power Level           | 10dBm                              |  |  |
|                             |                                    |  |  |



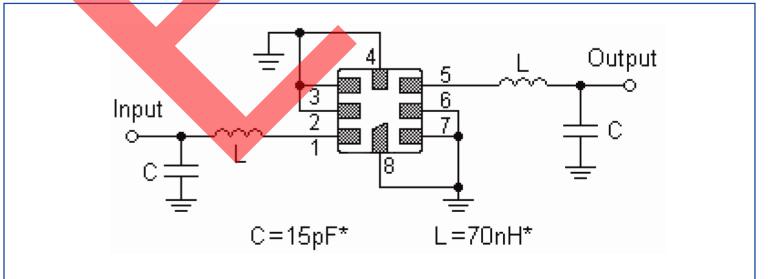


#### > APPLICATIONS:

Automotive Electronics/Remote Control

| 1  | nput Power Level                              |         | 10dBm   |         |                     |                                      |
|--|---|---------|---------|---------|---------------------|--------------------------------------|
| Pa   | rameters                                      | Minimum | Typical | Maximum | Units               | Notes                                |
| Center Frequency   | (f <sub>c</sub> )                             |         | 303.825 |         | MHz                 |                                      |
| 3dB Pass Band (B   | SW <sub>3</sub> )                             |         | 600     | 900     | kHz                 |                                      |
| Insertion Loss (IL   | )   |         | 3.0     | 4.5     | dB                  |                                      |
|  |   | 40      | 50      |         |                     | at 282.425 MHz<br>(Image)            |
| Rejection  |   | 20      | 30      |         | dB                  | at 293.125 (LO)                      |
|  |   |         | 60      |         |                     | Ultimate                             |
| Temperature Turnov<br>(f <sub>o</sub> )<br>Freque<br>Tempe | Turnover<br>Temperature (T <sub>o</sub> )     | 25      |         | 55      | °C                  |                                      |
|  | Turnover Frequency $(f_{o})$                  |         | 303.825 |         | MHz                 |                                      |
|  | Frequency<br>Temperature<br>Coefficient (FTC) |         | 0.032   |         | ppm/°C <sup>2</sup> |                                      |
| Frequency Aging  | fA  |         | 10      |         | ppm/yr              | Absolute value during the first year |

### **TEST CIRCUIT:**

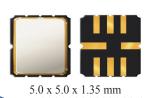




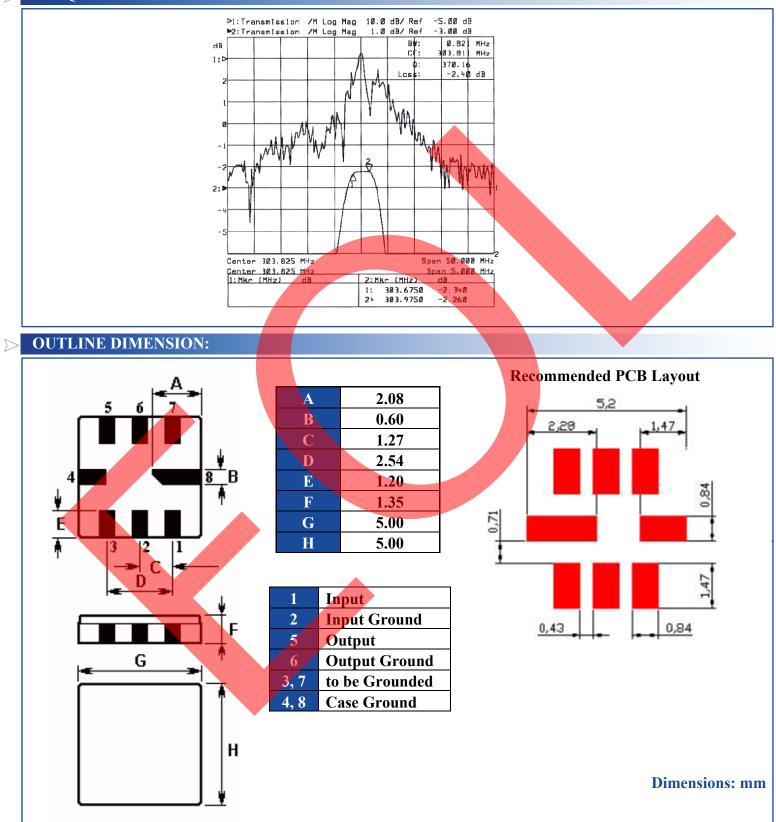
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## AFS303.825E

## (Pb) RoHS/RoHS II Compliant



### **FREQUENCY CHARACTERISTICS**



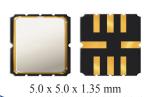




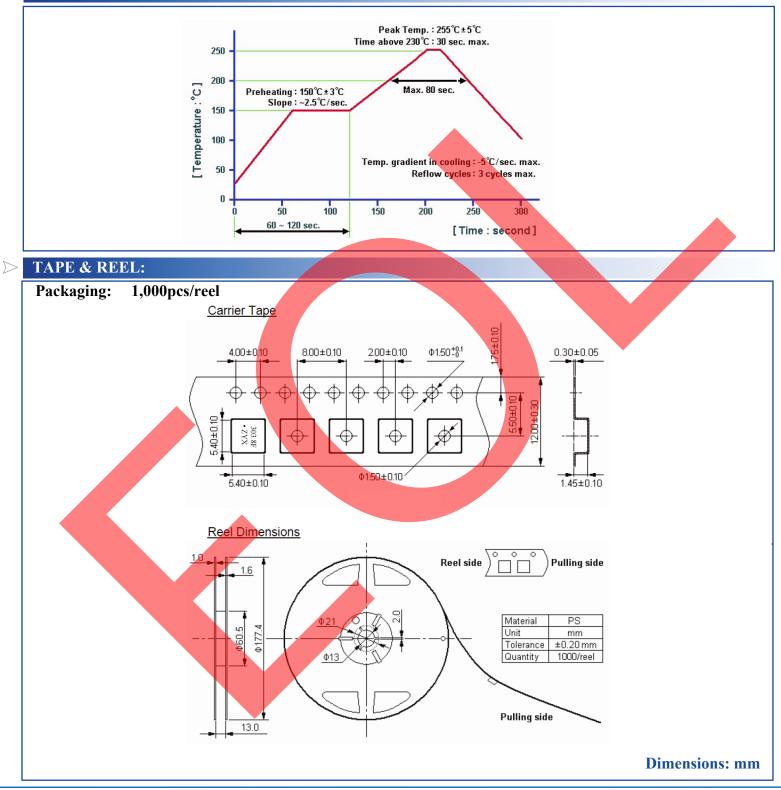
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**REFLOW PROFILE:** 



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