

ECN/PCN No.: R0049

For Manufacturer			
Product Description: SMD 303.825MHz SAW Filter	Abracon Part Number / Part Series: AFS303.825E	<input type="checkbox"/> Documentation only <input type="checkbox"/> ECN <input checked="" type="checkbox"/> EOL	<input type="checkbox"/> Series <input checked="" type="checkbox"/> Part Number
Affected Revision: D	New Revision: EOL	Application:	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
Prior to Change: N/A			
After Change: EOL			
Cause/Reason for Change: Due to low demand this part is discontinued.			
Change Plan			
Effective Date: 06/28/2021	Additional Remarks: N/A		
Change Declaration: EOL			
Issued Date: 06/28/2021	Issued By: <i>Nicholas El-Takach</i>	Issued Department: Engineering	
Approval: <i>Syed Raza</i> Engineering VP	Approval: <i>Reuben Quintanilla</i> Quality Director	Approval: <i>Ying Huang</i> Purchasing Director	
For Abracon EOL only			
Last Time Buy (if applicable): No last time buy.	Alternate Part Number / Part Series: N/A		
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: <div style="text-align: center;"><input type="checkbox"/> Approved <input type="checkbox"/> Not accepted</div> <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:			



5.0 x 5.0 x 1.35 mm

AFS303.825E

RoHS/RoHS II Compliant

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

APPLICATIONS:

- Automotive Electronics/Remote Control

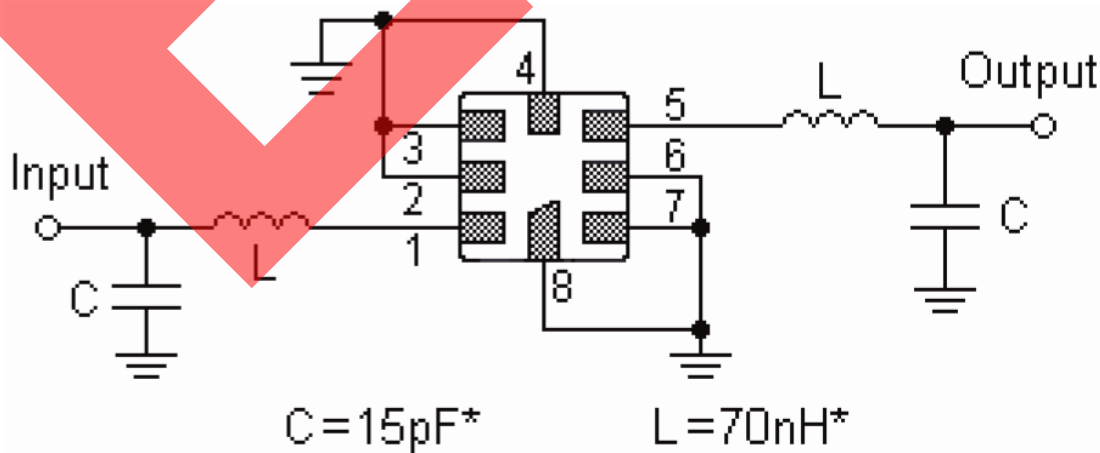
STANDARD SPECIFICATIONS:

Maximum Ratings

Item	Value
Operating Temperature Range	-10°C to +60°C
Storage Temperature Range	-40°C to +85°C
DC Voltage	12V
Input Power Level	10dBm

Parameters		Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_c)			303.825		MHz	
3dB Pass Band (BW_3)			600	900	kHz	
Insertion Loss (IL)			3.0	4.5	dB	
Rejection		40	50		dB	at 282.425 MHz (Image)
		20	30			at 293.125 (LO)
			60			Ultimate
Temperature	Turnover Temperature (T_o)	25		55	°C	
	Turnover Frequency (f_o)		303.825		MHz	
	Frequency Temperature Coefficient (FTC)		0.032		ppm/°C ²	
Frequency Aging [fA]			10		ppm/yr	Absolute value during the first year

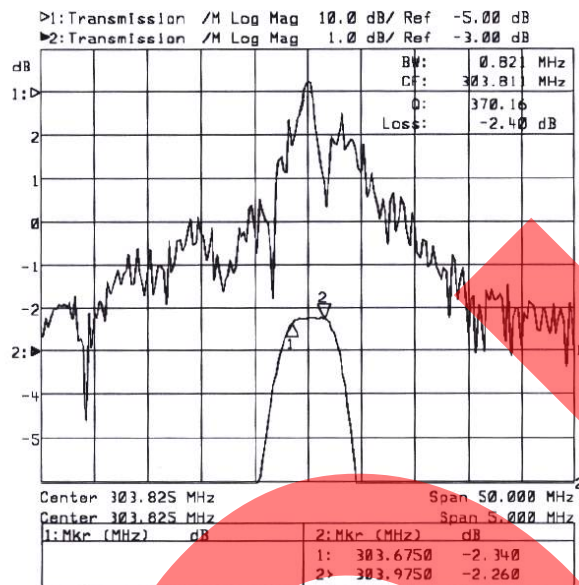
TEST CIRCUIT:



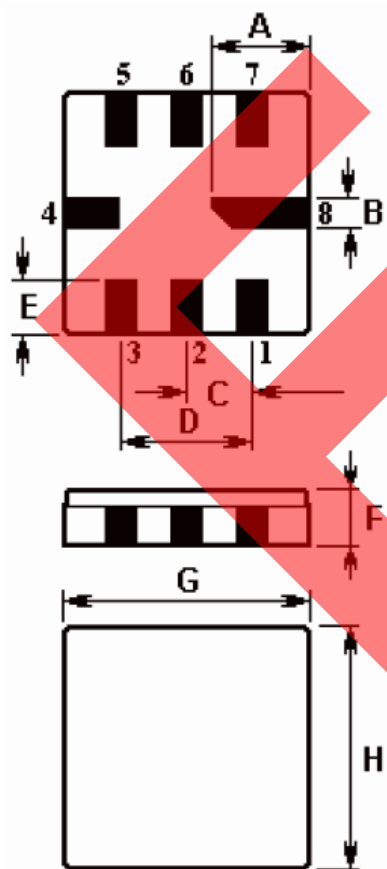


5.0 x 5.0 x 1.35 mm

FREQUENCY CHARACTERISTICS



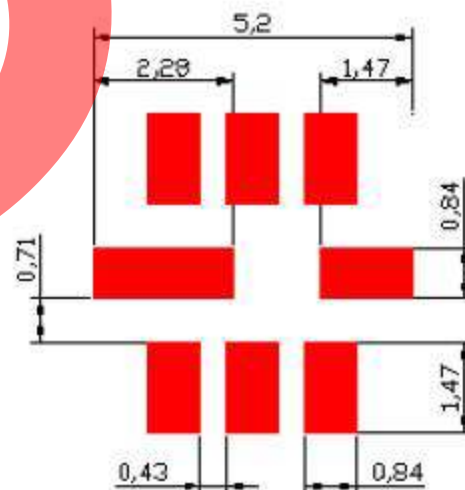
OUTLINE DIMENSION:



A	2.08
B	0.60
C	1.27
D	2.54
E	1.20
F	1.35
G	5.00
H	5.00

1	Input
2	Input Ground
5	Output
6	Output Ground
3, 7	to be Grounded
4, 8	Case Ground

Recommended PCB Layout

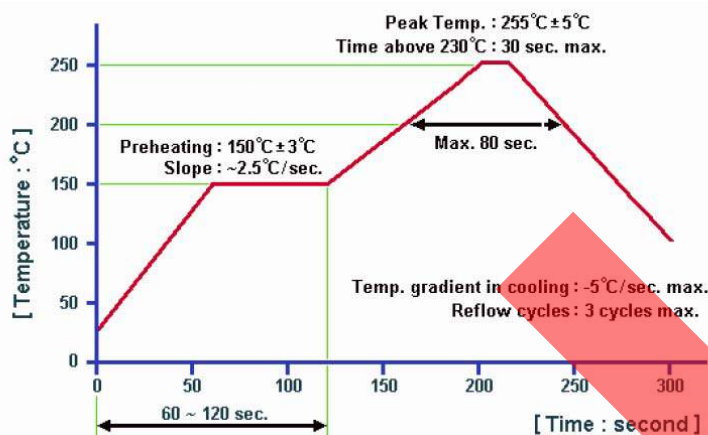


Dimensions: mm



5.0 x 5.0 x 1.35 mm

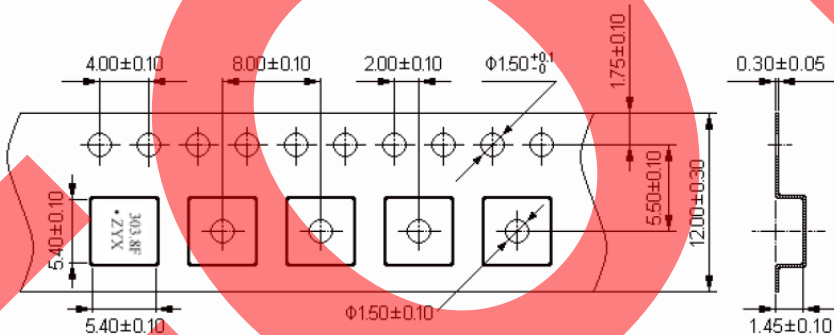
REFLOW PROFILE:



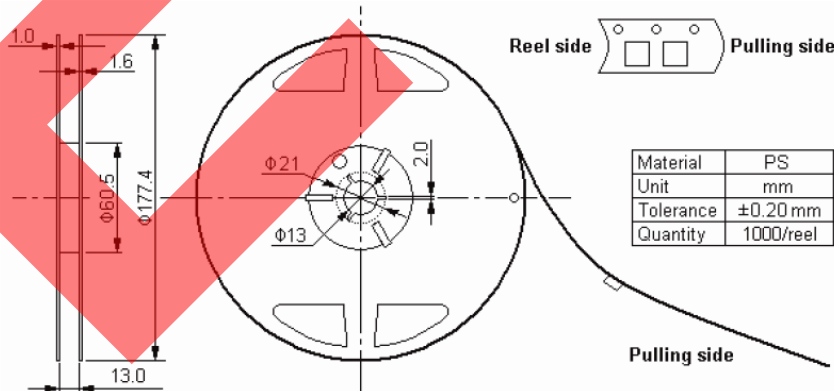
TAPE & REEL:

Packaging: 1,000pcs/reel

Carrier Tape



Reel Dimensions



Dimensions: mm

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.