

RF SAW Passband Filter – Mobile Communication Specification (Rev 3)

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Temexpress is a brand name of **rakon**

RF SAW Passband Filter – Mobile Communication

Specification (Rev 3)

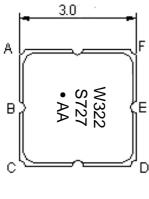
May 22nd, 2017

Features

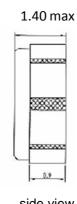
- □ RF SAW Filter for wireless applications
- 836.5 MHz Center Frequency
- Passband: 25MHz
- **Ceramic package for Surface Mounted Technology**

Package drawing & Pin out

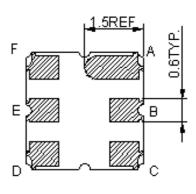
The product is in conformance with the European RoHs Regulation 2002/95.



top view

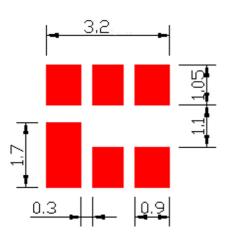


side view



bottom view





suggested pad

Pin configuration						
В	Input					
Е	Output					
A,C,D,F	Case Ground					

Marking		
Line 1	W322	Temexpress designation
Line 2	S727	S is production Code / 7 is Year 2017 & 27 is Week 27
Line 3	AA	AA" is internal production batch code, it corresponds to the wafer

Marking is made by Laser

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Technical characteristics

Reference Temperature: +25°C

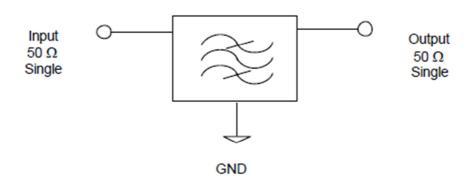
Ele	ctrical Parameters	Unit	Minimum	Typical ⁽¹⁾	Maximum			
Center Frequency fo		MHz	-	836.5	-			
PassBand Width		MHz	25	-	-			
Insertion Loss in 82	4 MHz – 849 MHz	dB	-	2.1	3.0			
Amplitude Ripple in	824 MHz – 849 MHz	dB	-	1.2	2.0			
Absolute Attenuation	Absolute Attenuation							
DC ~ 800 MHz		dB	23	26	-			
869 ~ 894 MHz		dB	29	32	-			
978 ~ 1006 MHz		dB	25	28	-			
1050 ~ 2500 MHz		dB	15	18	-			
VSWR within 824 M	VSWR within 824 MHz – 849 MHz			1.8	2.3			
Input Impedance		Ohms	-	50 ⁽²⁾	-			
Output Impedance	Ohms	-	50 ⁽²⁾	-				
Package type & size	Package type & size							
Length x Width		mm		3.0 x 3.0				
Height	mm		1.3	1.4				
Pin Out	Pin Out							
Input B				E				
Case Ground A, C, D, F								

Note:

- (1) Typical values are nominal performances at room temperature
- (2) No external matching circuit is required

Measurement circuit

50 Ω / 50 Ω Configuration



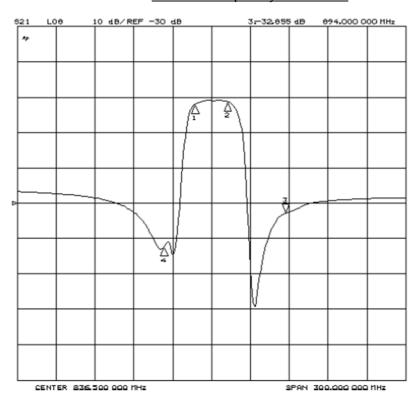
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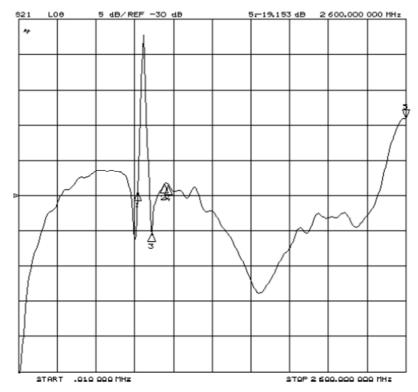
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Frequency characteristics

TYPICAL Frequency RESPONSE





CH1 Markers 1:-29.394 dB 800.000 MHz

CH1 Markers 1:-1.9192 dB 824.000 MHz

21-1.2229 d9 849.000 MHz

4:-42.278 dB 800.000 MHz

21-29.395 49 978.000 NHz

3:-35.256 dB 994.000 MHz 4:-28.523 dB

4:-28.523 dB 1.00600 6Hz

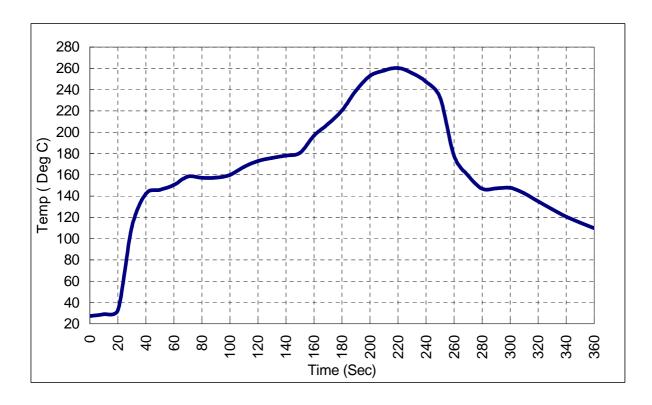
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Maximum ratings

Storage Temperature Range	°C	[-30°C; +85°C]
Operating Temperature	°C	[-40°C; +85°C]
DC Voltage	V	0V
Maximum Input Power Handling	dBm	10

Recommended reflow soldering profile



The components shall remain within the electrical specifications after it soldered on the 1mm thickness PCB board and dipped in the solder at 260 \pm 5 degC during 10 \pm 1 seconds.

The components shall remain within the electrical specifications after it soldered by electric iron, solder at 350 \pm 10 degC during 3~4 seconds. Recovery time: 2h \pm 0.5h.

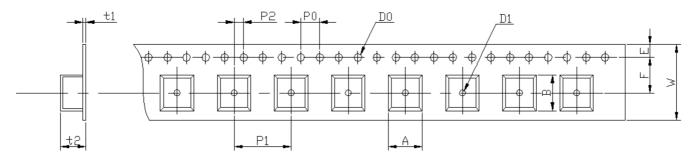
Ultrasonic cleaning may cause deterioration and destruction of the component. Please avoid ultrasonic cleaning.

Only leads of component may be soldered. Please avoid soldering another part of component.

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Tape Specifications

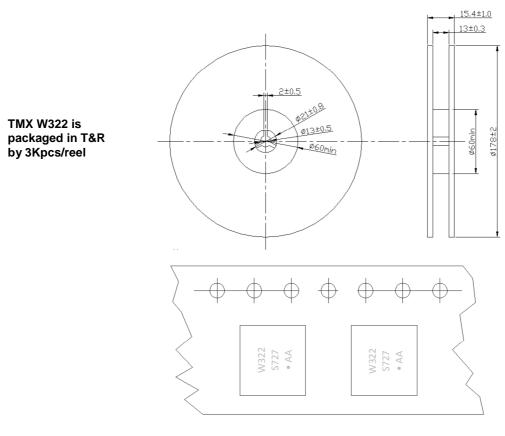


Tape running direction

W	F	Е	P0	P1	P2	D0	D1	t1	t2	Α	В
12 ±0.3	5.5 ±0.3	1.75 ±0.1	4.0 ±0.2	8.0 ±0.1	2.0 ±0.2	Ø1.5 ±0.1	Ø1.5 ±0.25	0.31 max	1.5 max	3.4 max	3.4 max

unit: mm

Reel Specifications



Tape running direction