



*Total Solution Provider in Saw Device*

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# SD-072301-S34

SAW DUPLEXER For 723.0MHz / 778.0MHz  
Revision 0: August 2014



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
- 

**SAWNICS Inc.**

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460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.  
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / [www.sawnics.com](http://www.sawnics.com)



**Electrical Characteristics**

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-5	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	0		
Maximum Input Power	W	30dBm > 50,000 Hours, CW tone(Ta= +50°C)		
Input Impedance	Ω	50		
Output Tx Impedance	Ω	50		
Output Rx Impedance	Ω	50		
Package type & size	S34			
Length x Width	mm <sup>2</sup>	-	3.8 x 3.8	-
Height	mm	-	-	1.45

**Electrical Specification**

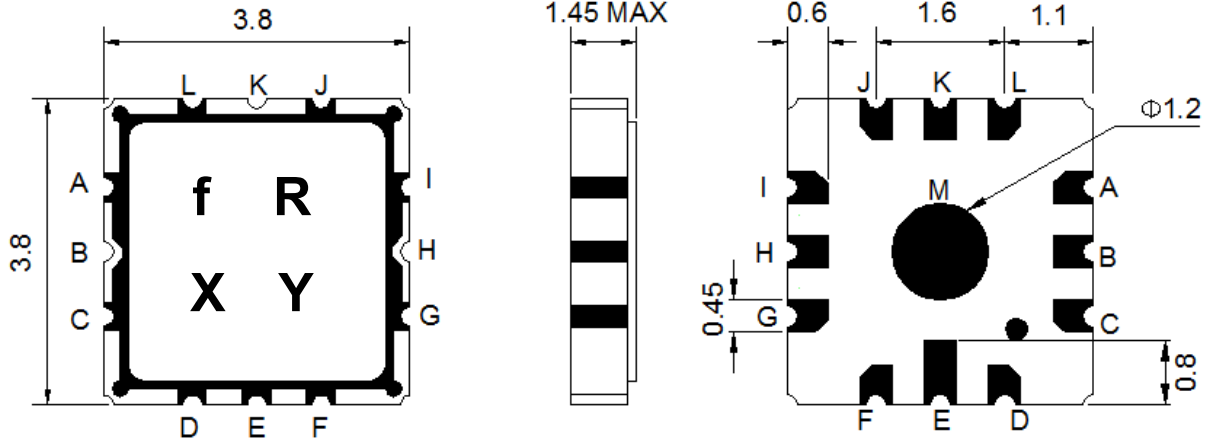
Ant →Tx(723.0MHz)		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	718.0 ~ 728.0	dB	-	1.3	3.0
Amplitude Ripple	718.0 ~ 728.0	dB <sub>p-p</sub>	-	0.6	1.2
VSWR	718.0 ~ 728.0	-	-	1.5	2.0
Absolute Attenuation	773.0 ~ 783.0	dB	35	41	-

Rx(778.0MHz) →Ant		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Insertion Loss	773.0 ~ 783.0	dB	-	1.5	3.0
Amplitude Ripple	773.0 ~ 783.0	dB <sub>p-p</sub>	-	0.6	1.2
VSWR	773.0 ~ 783.0	-	-	1.5	2.0
Absolute Attenuation	718.0 ~ 728.0	dB	30	38	-

Tx →Rx		Specifications			
Parameters Description	Condition [MHz]	Unit	Minimum	Typical	Maximum
Isolation	718.0 ~ 728.0	dB	30	39	-
	773.0 ~ 783.0	dB	35	43	-

**Notes :** (1) With Matching Network

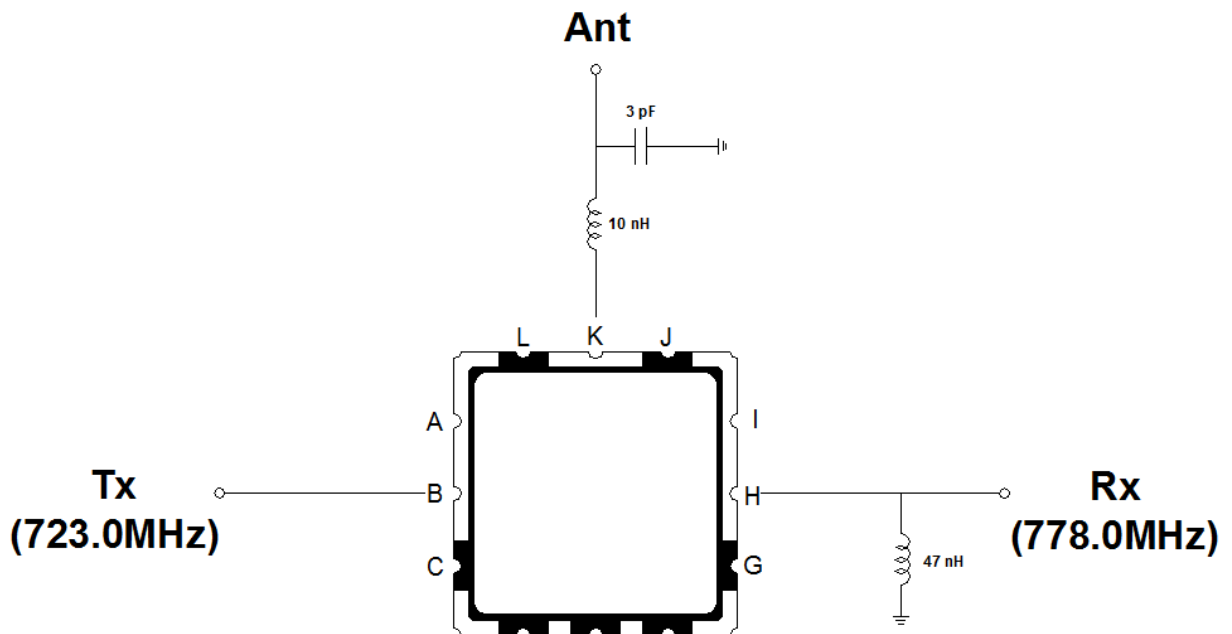
**Package Dimensions**



Marking Descriptions	
f	Wireless Application
R	Series Number
X	Date Code(Year)
Y	Date Code(Month)

Pin Description	
A, C, D, E, F, G, I, J, L, M	Ground
K	Ant
B	Tx (723.0MHz)
H	Rx (778.0MHz)

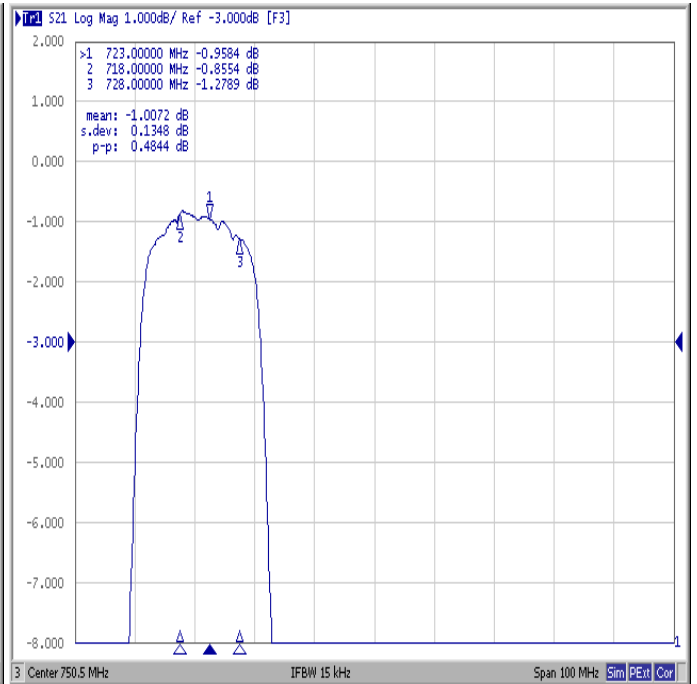
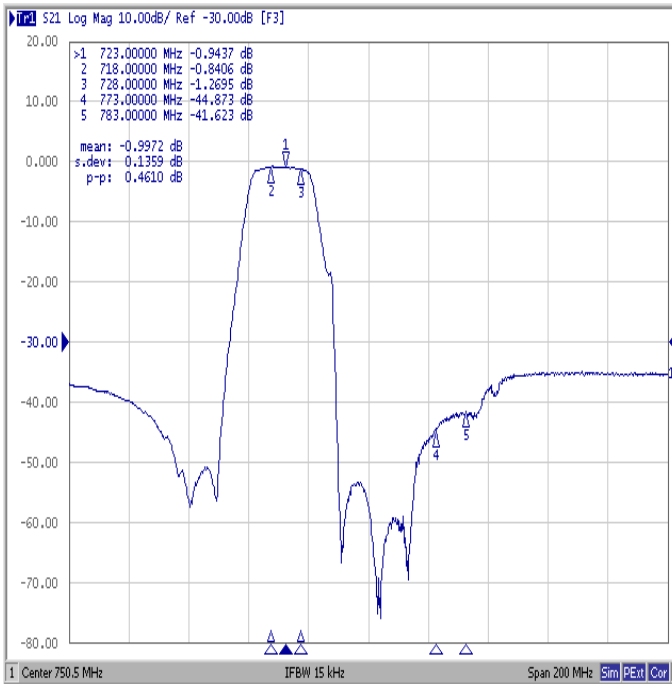
**Testing Environment**



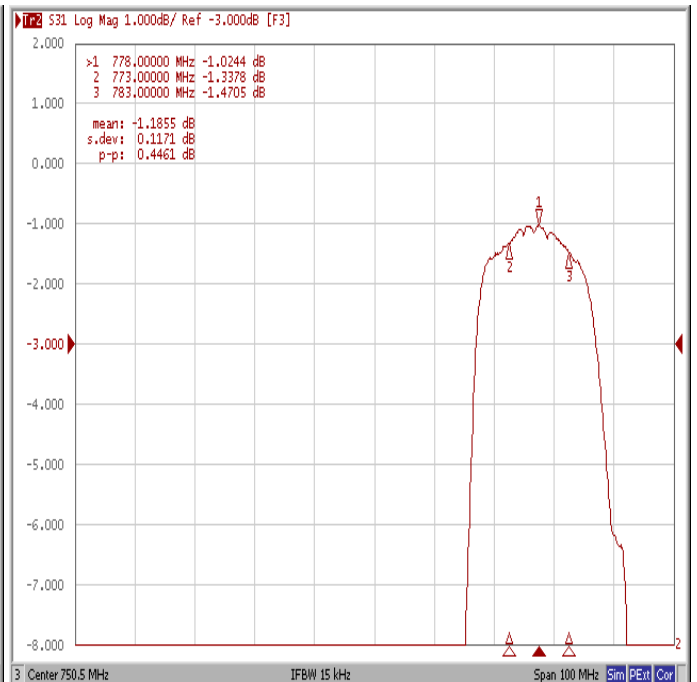
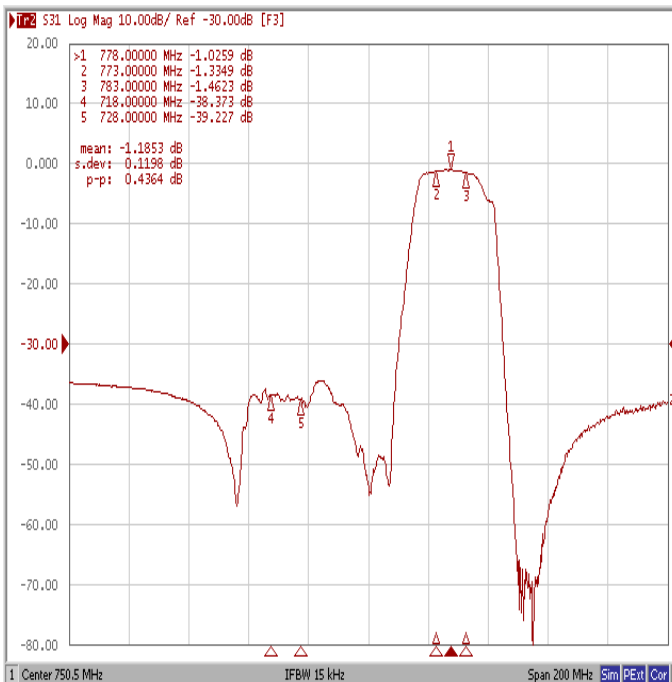


### Frequency Characteristics

#### Tx to Ant

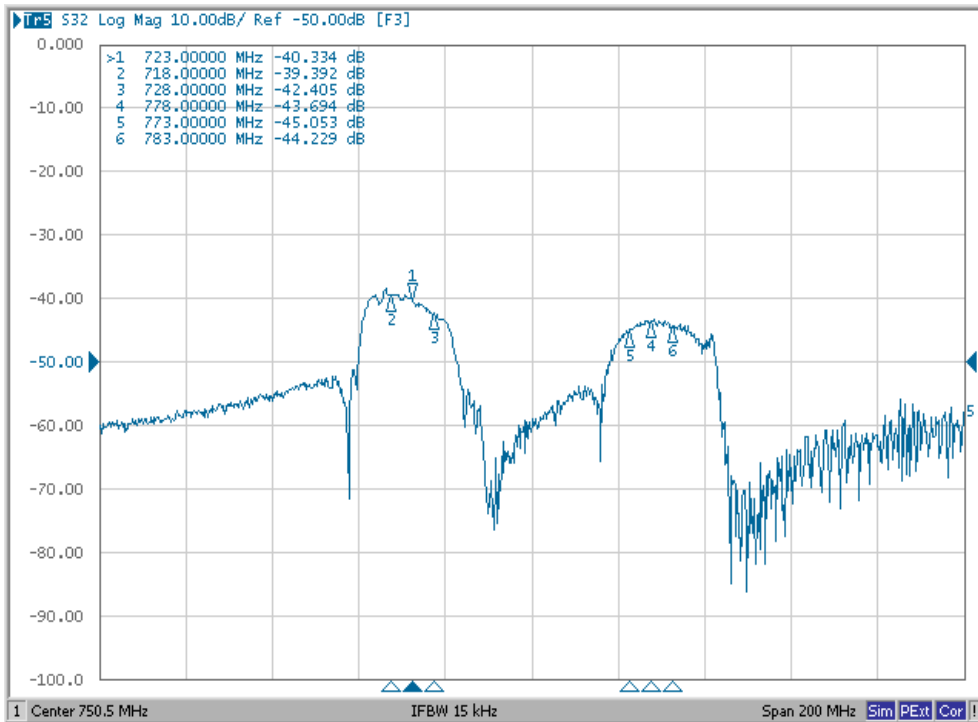


#### Ant to Rx



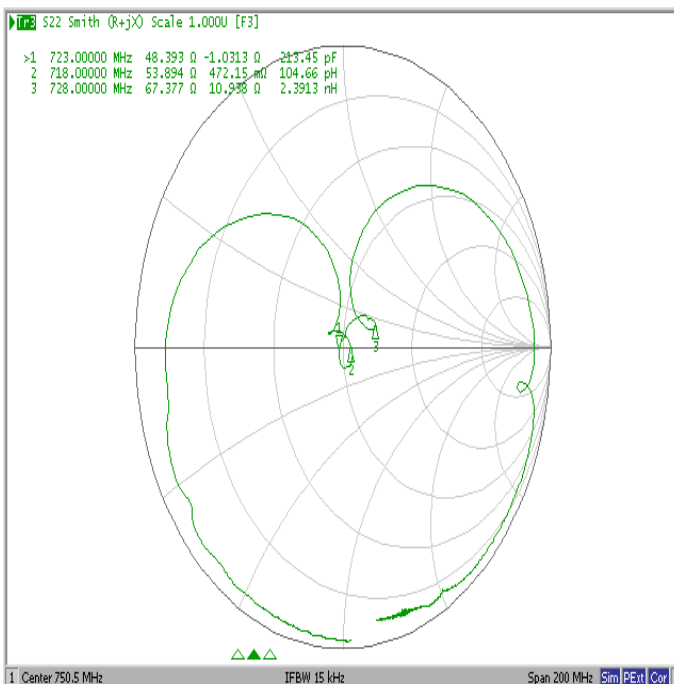


Isolation

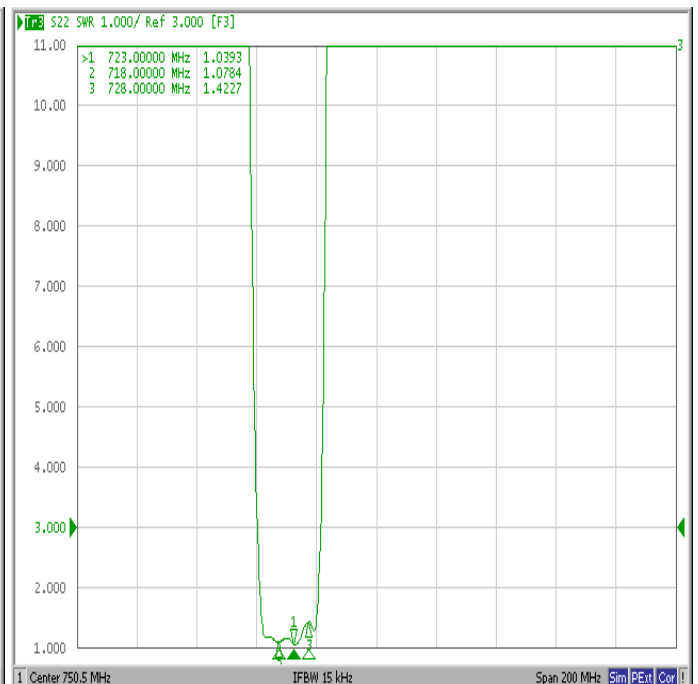


Tx Part

Smith Chart



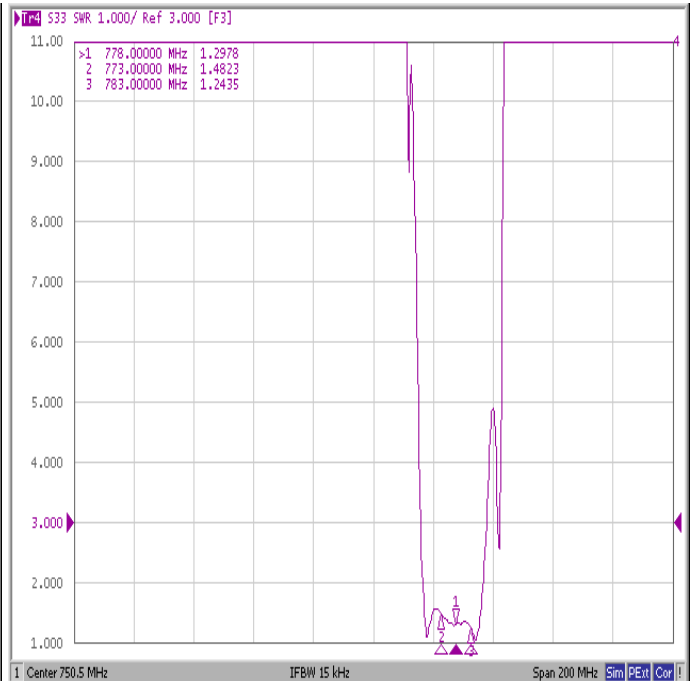
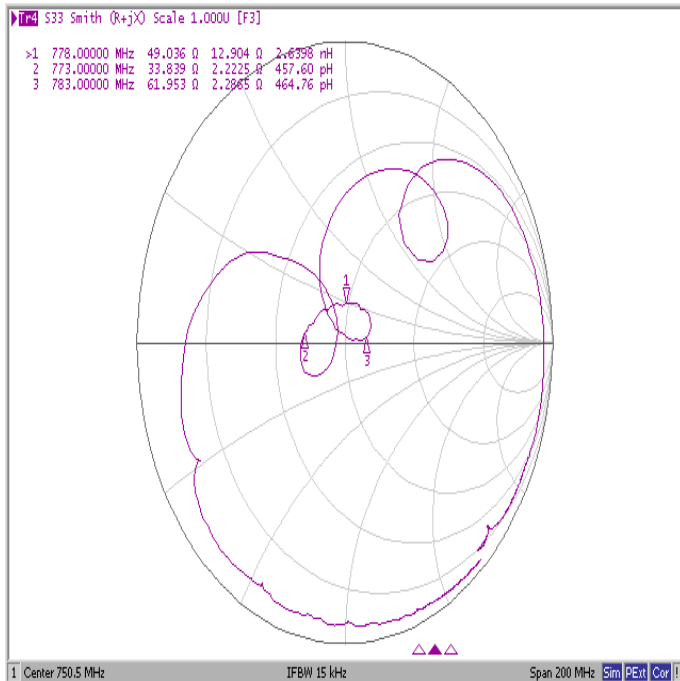
VSWR



### Rx Part

**Smith Chart**

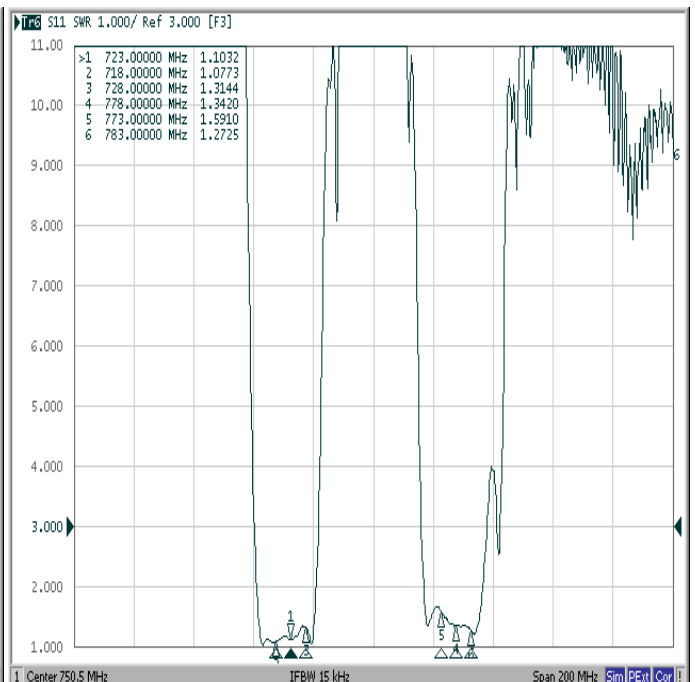
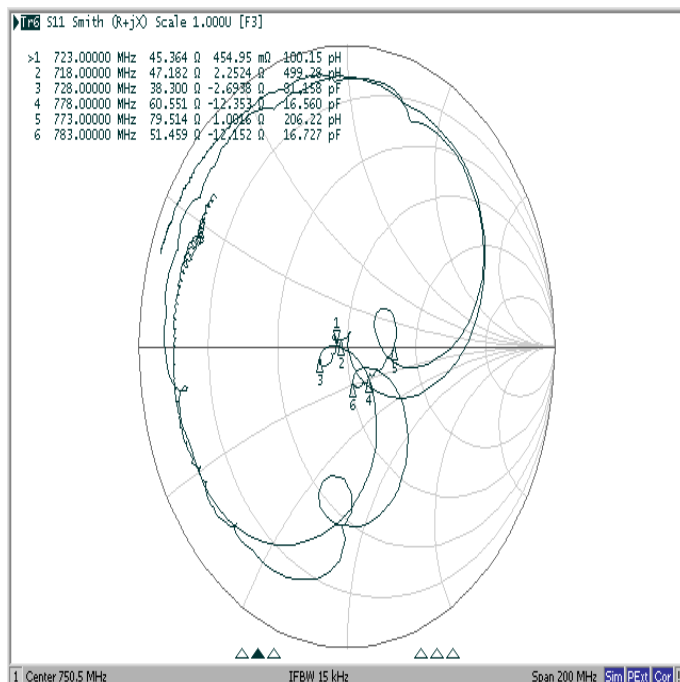
**VSWR**



### Antenna

**Smith Chart**

**VSWR**





Wide Span

