



# APPROVAL SHEET

Approval Specification	Customer's Approval Certificate
<p><b>TO:</b></p> <p><b>Part No.:</b></p> <p><b>Customer's Part No.:</b></p>	<p>Please return this copy as a certification of your approval</p> <p><b>Checked &amp; Approved by:</b></p> <p><b>Date:</b></p>

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**Application**

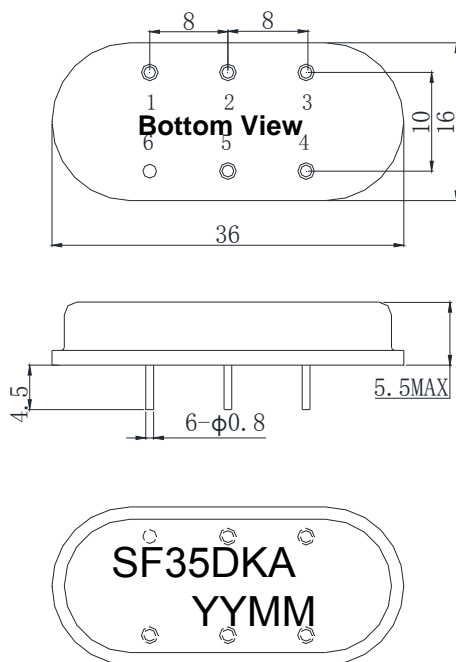
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 6 MHz
- Low Shape Factor

**Features**

- RoHS compatible
- Package size 39.1x26.1x7.50mm<sup>3</sup>
- Package Code SB01-02
- Electrostatic Sensitive Device(ESD)



**Package Dimensions (Unit: mm)**



**Pin Configuration**

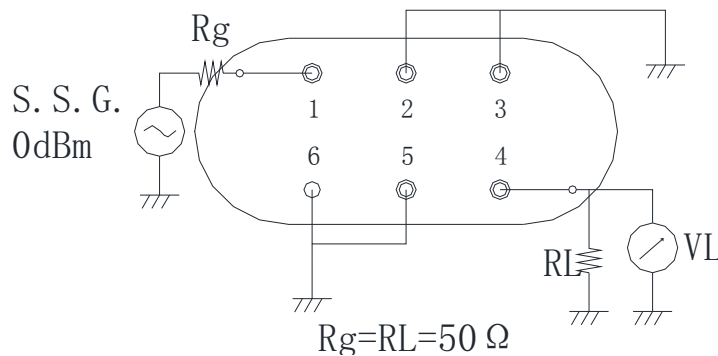
Pin No.	Description
1	Input
4	Output
1,2,3,5	Ground

**Marking Description**

<b>S</b>	Trademark
<b>F</b>	SAW Filter
<b>35DKA</b>	Part Number
<b>YYMM</b>	Year Code & Month Code

\*Fig: If the products produced in 06<sup>th</sup> Month of 2012, The year code & month code is 1206.

**Test Circuit(Bottom View)**



**Performance****Maximum Rating**

Item		Value	Unit
DC Voltage	$V_{DC}$	3	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	$T_{stg}$	-55 ~ +125	°C
RF Power Dissipation	P	10	dBm

**Electronic Characteristics**

Test Temperature:  $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$

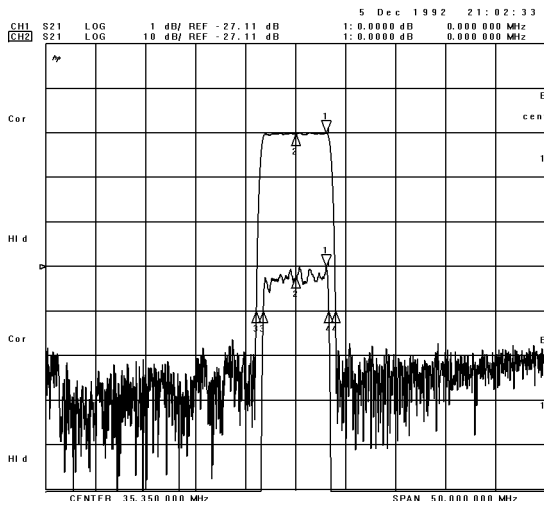
Terminating source impedance:  $50\Omega$

Terminating load impedance:  $50\Omega$

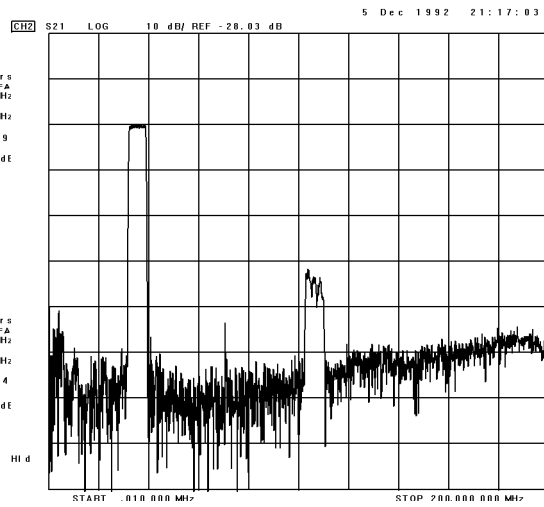
Item		Minimum	Typical	Maximum	Unit
Center Frequency	$f_c$		35.35		MHz
Insertion Loss(min)	IL		27.1	28.0	dB
Insertion Loss (With a base of 38MHz)	31.5 MHz	22.0	24.0		
	32 MHz		1.4	2.6	
	38.75 MHz		2.4	2.6	
	39.25 MHz	22.0	34.0		
Amplitude Ripple (p-p) 32.35-38.35MHz	$\Delta a$		0.4	1.0	dB
3 dB Bandwidth	$BW_{3dB}$	6.5	6.8		MHz
40 dB Bandwidth	$BW_{40dB}$		7.9	8.0	MHz
Group Delay Ripple(relative to 38.00 MHz) 32.35-38.35MHz	GDR		65.0	70.0	ns
Absolute Attenuation	$a$				
	20.00-30.35 MHz	40.0	48.0		dB
	40.35-60.00 MHz	40.0	48.0		dB

Frequency Characteristics

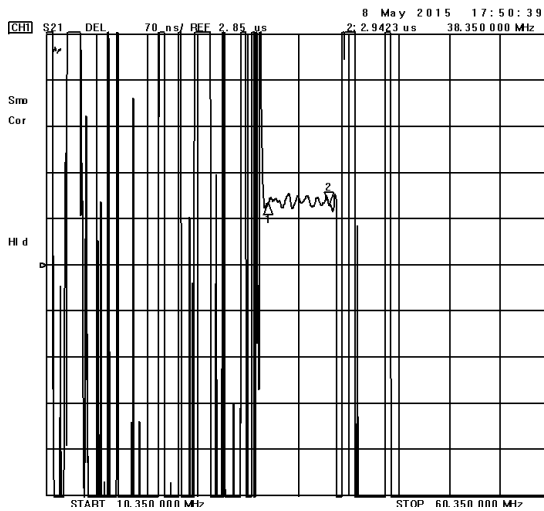
Frequency Response



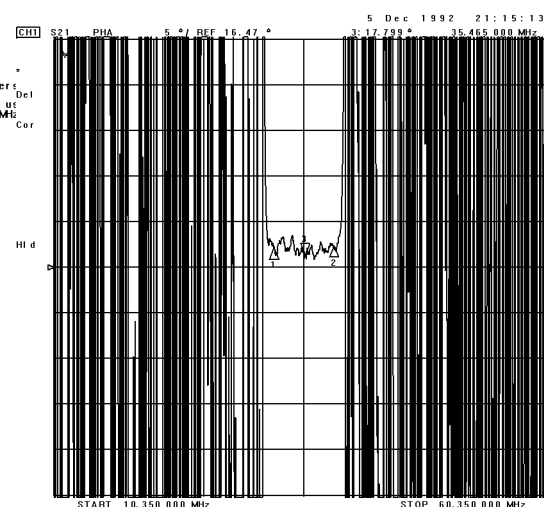
Frequency Response (wideband)



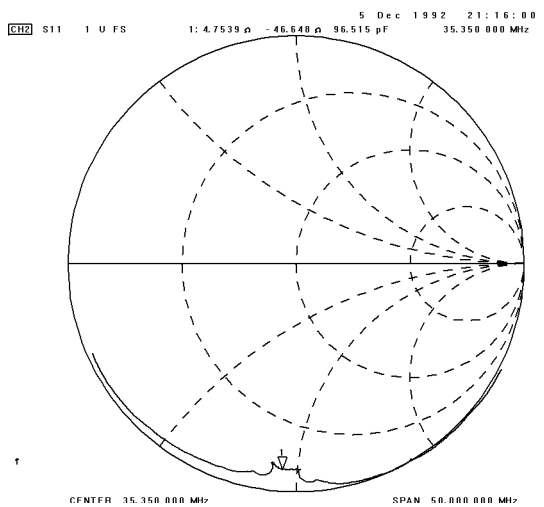
Delay Ripple



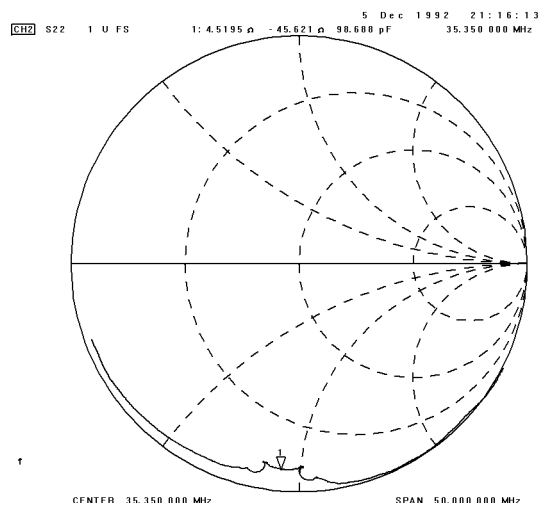
Phase Linearity



S11 Smith Chart



S22 Smith Chart





**Notes**

1. As a result of the particularity of inner structure of SAW products, it easy to be breakdown by electrostatic, so we should pay attention to **ESD protect** in the test.
2. **Static voltage** between signal load and ground may cause deterioration and destruction of the component. Please avoid static voltage.
3. **Ultrasonic cleaning** may cause deterioration and destruction of the component. Please avoid ultrasonic cleaning.
4. Only leads of component may **be soldered**. Please avoid soldering another part of component.
5. There is a close relationship between the device's performance and **matching network**. The specifications of this device are based on the test circuit shown above. L and C values may change depending on board layout. Values shown are intended as a guide only.