

To \_\_\_\_\_

No. ZWCD-040403M-01

Date 29th Aug. '03

Type No.  
**WTDA1**

Data Sheet

<b>WCDMA Tx SAW Filter</b>	
Application	: Tx Filter for WCDMA
Center Frequency	: 1950MHz
Size	: 2.0x1.4mm, 5pin-layout
Impedance	: 50-50ohms unbalance-unbalance
Part No.	: EFCH1950TCD1

Issued *A. Tsunekawa*  
Check *K. Nishimura*

CIRCUIT COMPONENTS BUSINESS UNIT  
**MATSUSHITA ELECTRONIC COMPONENTS CO.,LTD**  
KADOMA, OSAKA, JAPAN

**WCDMA Tx SAW Filter**

----- Unbalanced input and unbalanced output -----

Part No. :

Design No. : T1950F1

Parameter	Frequency	Your request			Our Target			Unit
		Min.	Typ.	Max.	Min.	Typ.	Max.	
Passband					1920 ... 1980			MHz
Insertion loss	1920 ... 1980MHz					2.3	2.9	dB
Ripple in passband	1920 ... 1980MHz					0.6	1.3	dB
Attenuation	Att1	0.1 ... 1805MHz				31	36	dB
	Att2	1805 ... 1880MHz				20	24	dB
	Att3	2110 ... 2170MHz				35	37	dB
	Att4	2170 ... 3840MHz				24	30	dB
	Att5	3840 ... 3960MHz				30	48	dB
	Att6	5760 ... 5940MHz				30	45	dB
VSWR	Input	1920 ... 1980MHz				1.9	2.1	
	Output	1920 ... 1980MHz				1.9	2.1	
Input impedance (Single Ended)					50			Ohm
Output impedance (Single Ended)					50			Ohm
Maximum drive level							+12	dBm
Operating temperature					-30		+85	deg. C
Storage temperature					-40		+85	deg. C

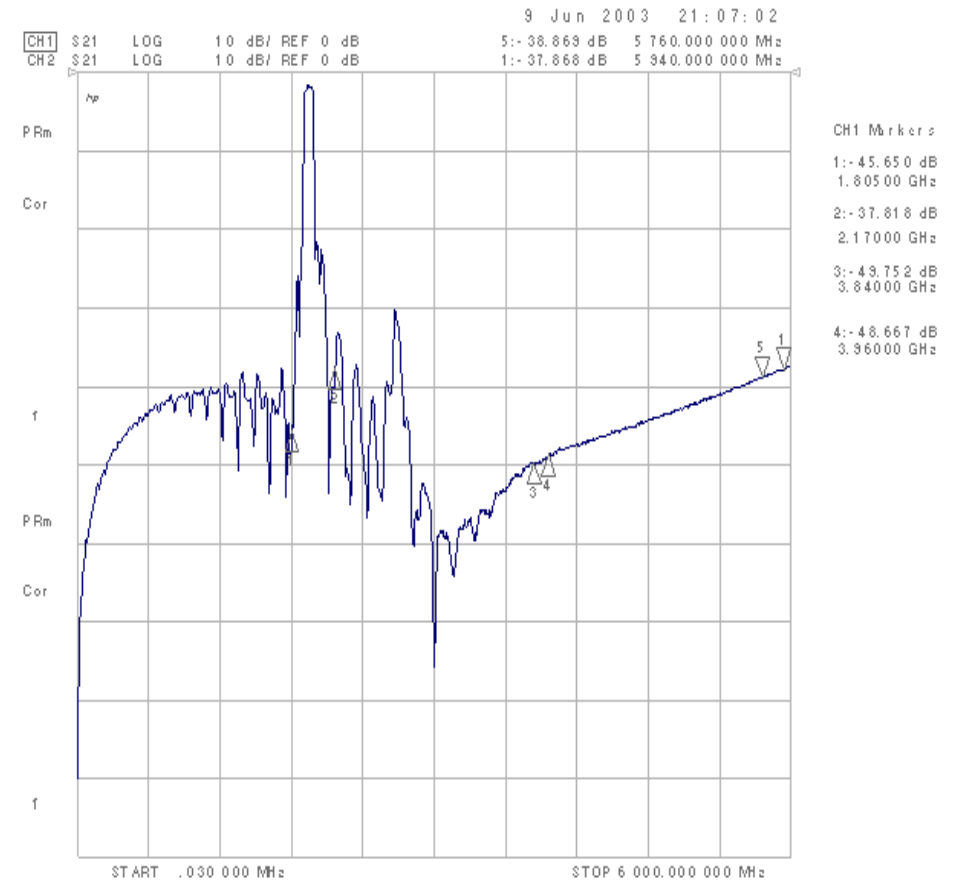
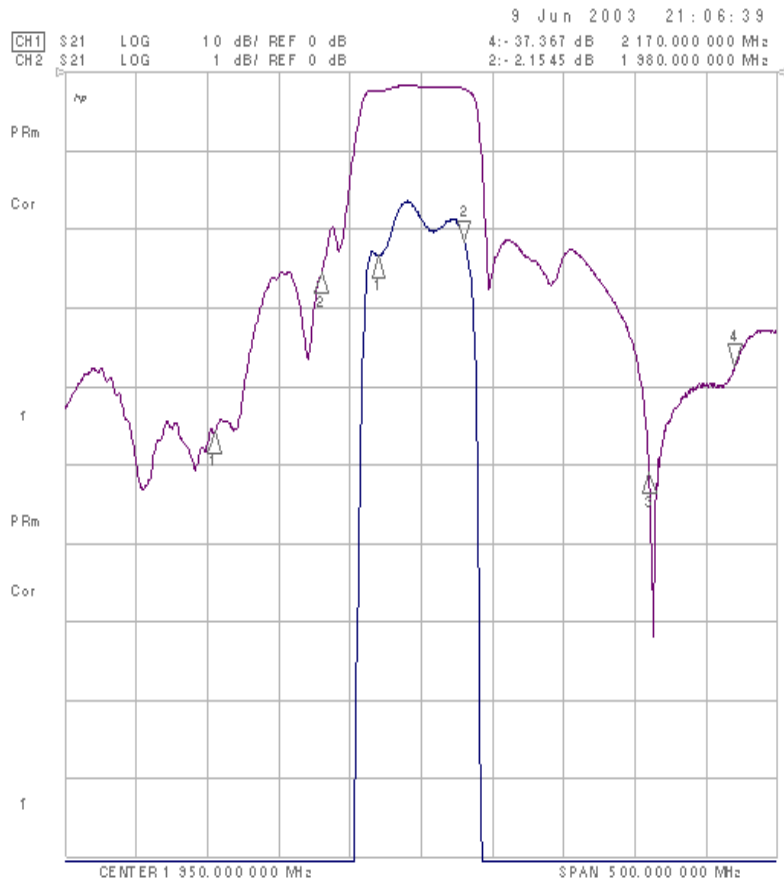
## WCDMA Tx SAW Filter

----- Unbalanced input and unbalanced output -----

Part No. :

Design No. : T1950F1

JIG LOSS = 0.2dB

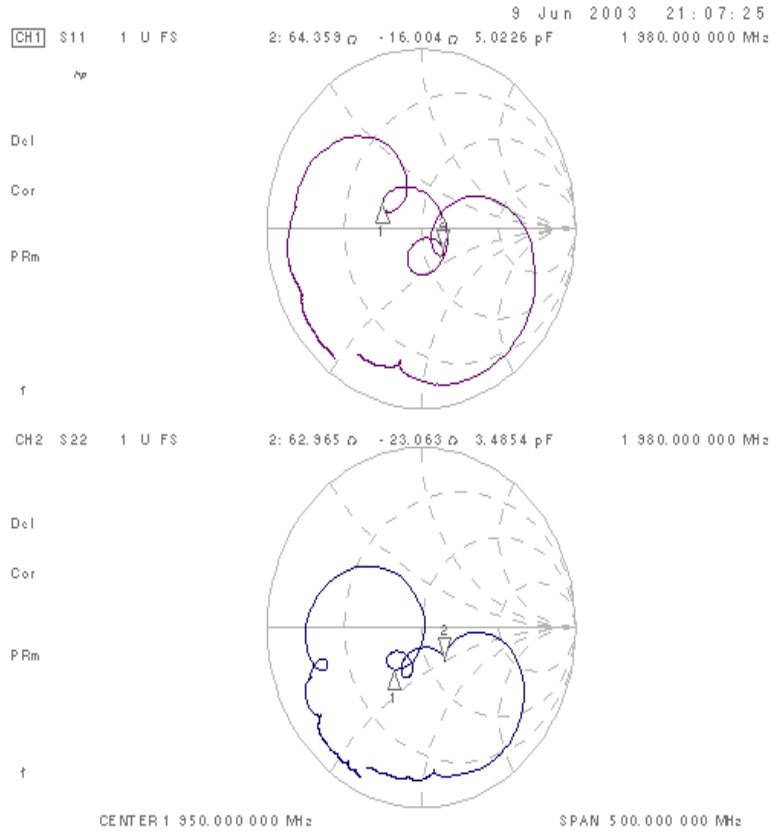


# WCDMA Tx SAW Filter

----- Unbalanced input and unbalanced output -----

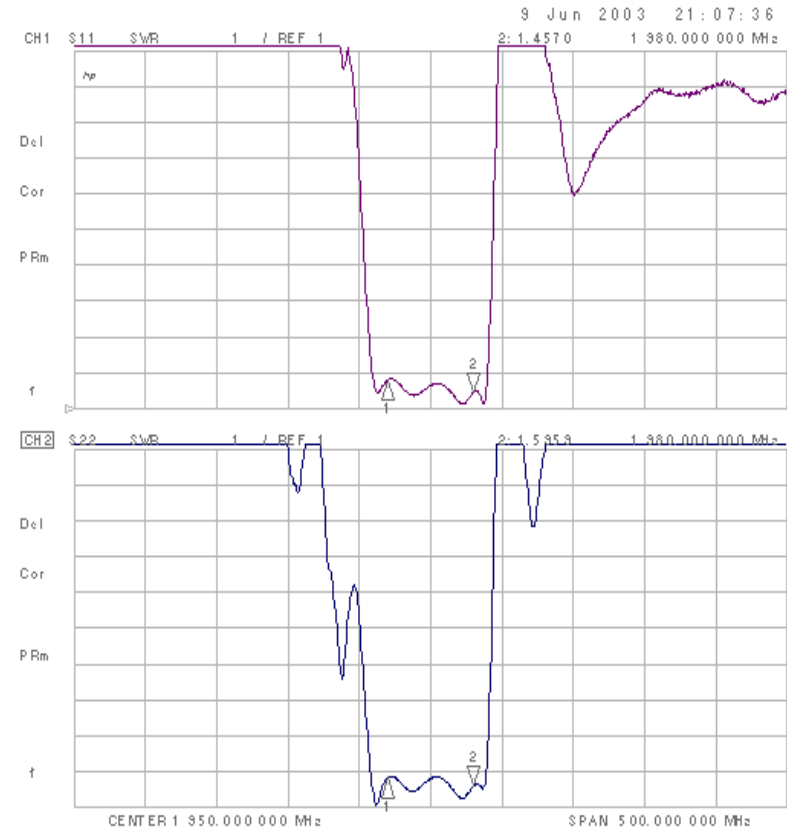
Part No. :

Design No. : T1950F1



CH1 Markers  
1: 28.839  $\text{dB}$   
8.7123  $\text{dB}$   
1.92000 GHz

CH2 Markers  
1: 31.635  $\text{dB}$   
-16.063  $\text{dB}$   
1.92000 GHz



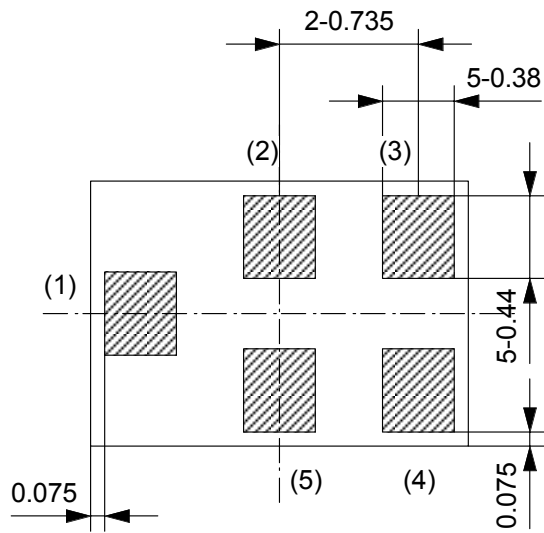
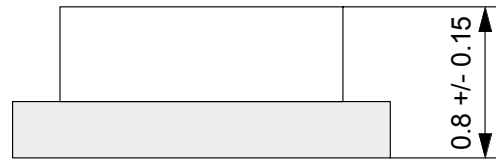
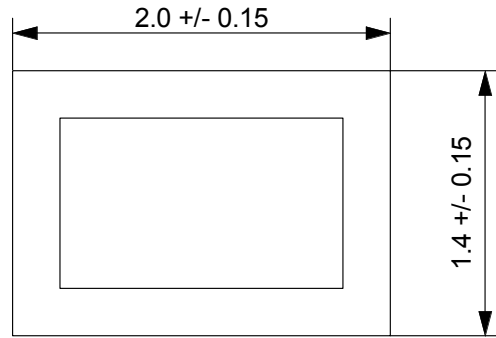
CH1 Markers  
1: 1.8107  
1.92000 GHz

CH2 Markers  
1: 1.8270  
1.92000 GHz

THIRD ANGLE PROJECTION

Tolerance : +/-0.05

*Under Development*



- (1) Input
- (2) GND
- (3) GND
- (4) Output
- (5) GND

**Note :**  
The design manufacturing process,  
and Specification of this device  
are subject to change without  
notice.

UNLESS OTHERWISE SPECIFIED		
BASIC DIMENSIONS		TOLERANCE
UP TO	INCL	
TO	INCL	
TO	INCL	
TO	INCL	
ABOVE		

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ISSUE	REVISIONS	DATE
MATERIAL	FINISH	SCALE
DESIGN		
DRAW		
CHECK		
APPROVAL		
DRAWING NO.		

NAME <b>SAW Filter</b>	TYPE NO.
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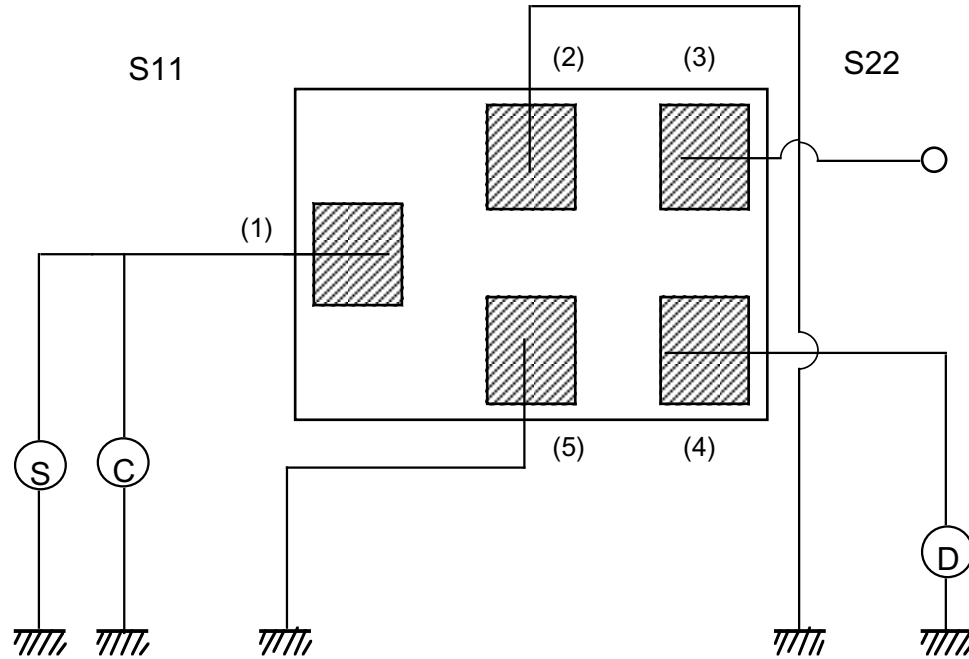
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DO NOT SCALE DRAWING

REVISIONS INDICATED BY Δ

ALL DIMENSIONS ARE IN MILLIMETERS

THIRD ANGLE PROJECTION



0 Level

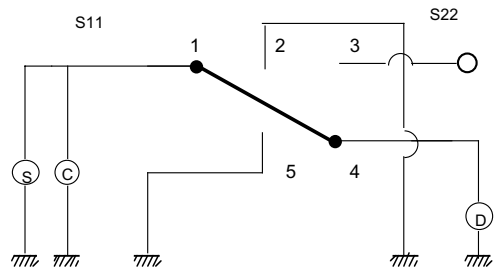


Fig. 2

S : Standard Signal Generator  
(Output Impedance 50 ohm)  
C : Frequency Counter  
D : Detector  
(Input Impedance 50 ohm)

UNLESS OTHERWISE SPECIFIED

BASIC DIMENSIONS		TOLERANCE
UP TO	INCL	
TO	INCL	
TO	INCL	
TO	INCL	
ABOVE		

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ISSUE	REVISIONS		DATE
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NAME	TYPE NO.
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SAW filter

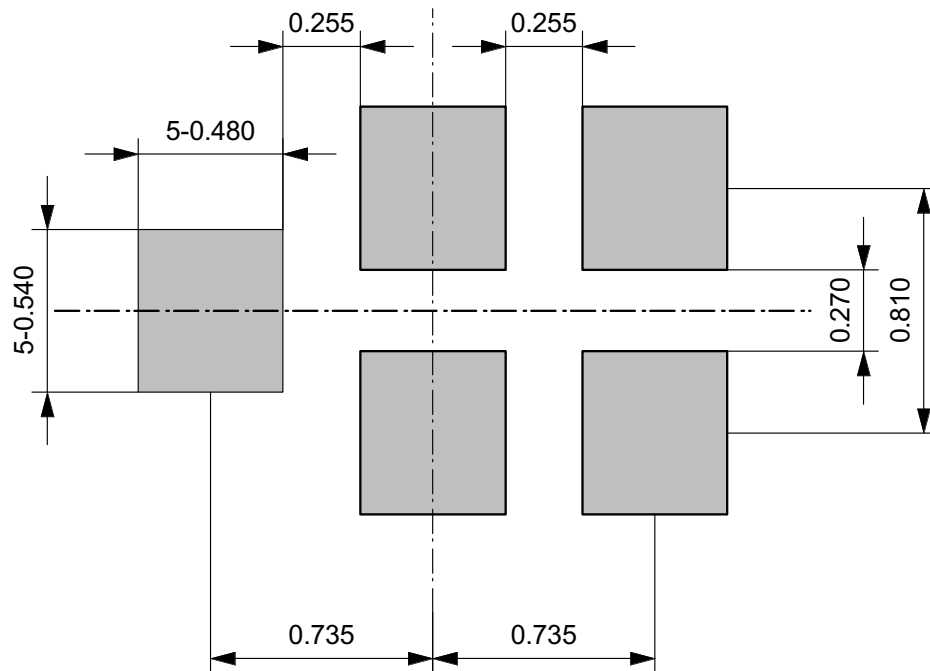
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THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED

**Recommended land pattern**

BASIC DIMENSIONS		TOLERANCE
UP TO	INCL	
TO	INCL	
TO	INCL	
TO	INCL	
ABOVE		



ISSUE	REVISIONS	DATE
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DESIGN		
DRAW		
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NAME	SAW Filter	TYPE NO.
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