

To _____

No. A236-040403N-01

Date 3rd Apr. '04



Data Sheet

DCS1800 Rx SAW Filter	
Application	: Rx Filter for DCS1800
Center Frequency	: 1842.5MHz
Size	: 2.0x1.4mm, 5pin-layout
Impedance	: 50-150ohms unbalance-balance
Part No.	: EFCH1842TCA7

Issued S. Suzuki
Check K. Nishimura

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

DCS1800 Rx SAW Filter

----- Unbalanced input and balanced output -----

Part No. :

Design No. : T1842TMD

Parameter		Frequency	Your request			Our preliminary spec.			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	
Passband			1805 ... 1880			1805 ... 1880			MHz
Insertion loss		1805 ... 1880MHz					1.7	2.4	dB
Ripple in passband		1805 ... 1880MHz					0.5	1.5	dB
Amplitude imbalance		1805 ... 1880MHz				-1.5	-0.6 +0.6	+1.5	dB
Phase imbalance		1805 ... 1880MHz				-10	-2 +0	+10	deg.
Attenuation	Att1	DC ... 1705MHz				30	38		dB
	Att2	1705 ... 1785MHz (T=+15 ... +60 deg.C)				12	15		dB
		1705 ... 1785MHz (T=-10 ... +80 deg.C)				10			dB
	Att3	1920 ... 1980MHz				12	18		dB
	Att4	1980 ... 2500MHz				20	25		dB
	Att5	2500 ... 3840MHz				25	30		dB
	Att6	3840 ... 6000MHz				20	40		dB
VSWR	Input	1805 ... 1880MHz					2.3	2.7	
	Output	1805 ... 1880MHz					2.1	2.4	
Input impedance (Single Ended)						50			Ohm
Output impedance (Differential)						150 // 22 nH			Ohm
Maximum drive level								13	dBm
Operating temperature						-10		+80	deg. C
Storage temperature						-40		+85	deg. C

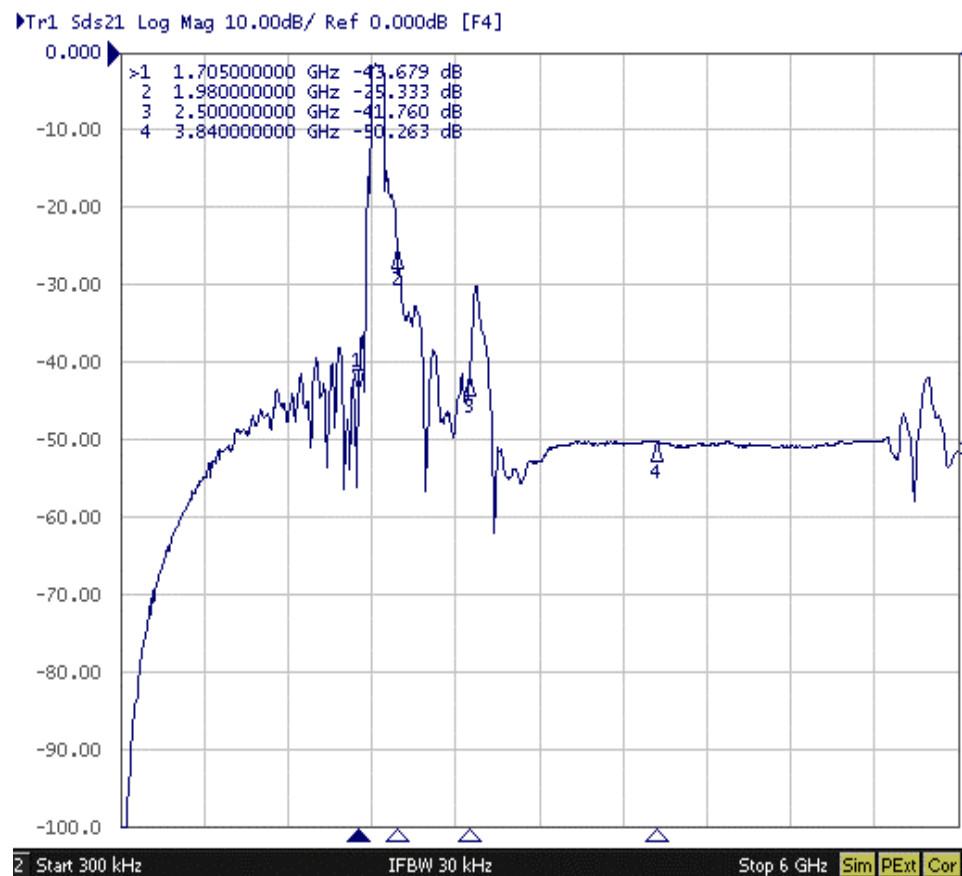
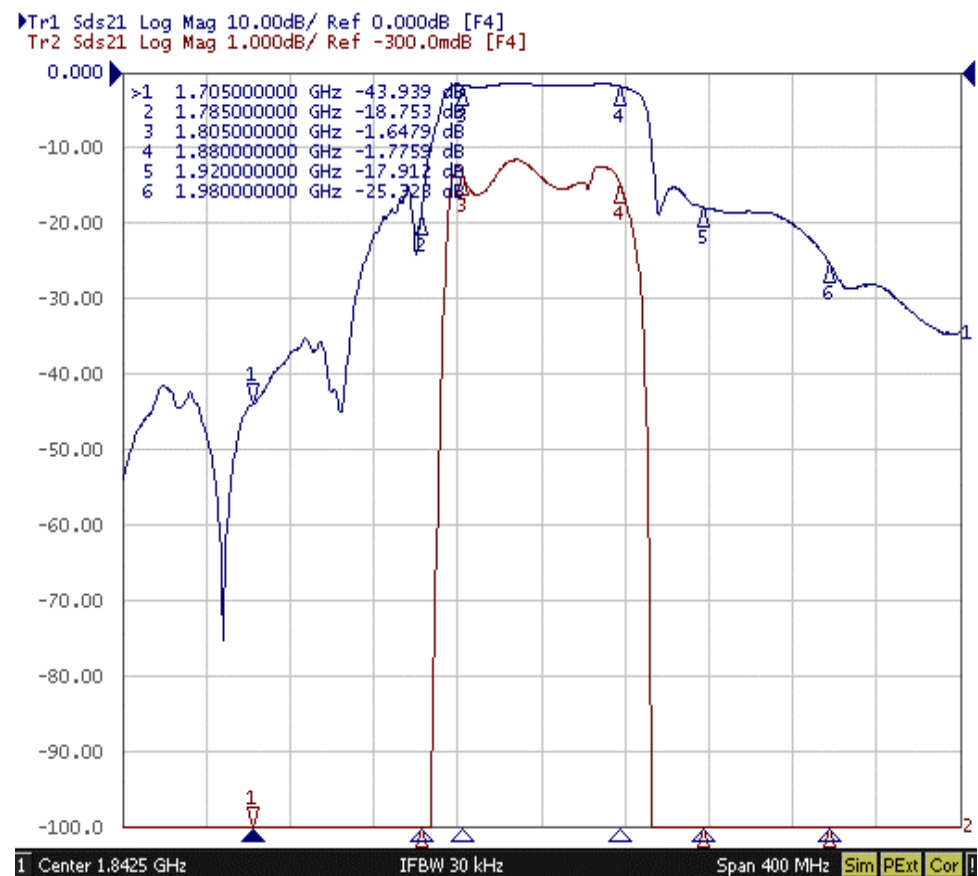
DCS1800 Rx SAW Filter

----- Unbalanced input and balanced output -----

Part No. :

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Jig Loss = 0.3dB



DCS1800 Rx SAW Filter

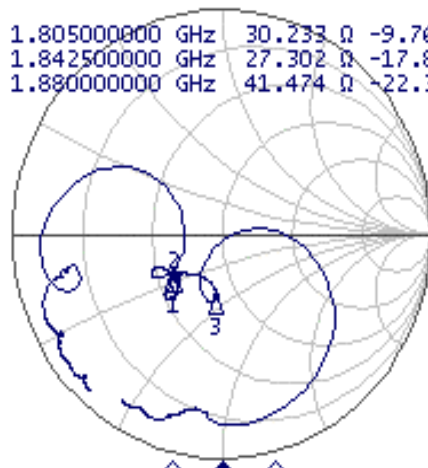
----- Unbalanced input and balanced output -----

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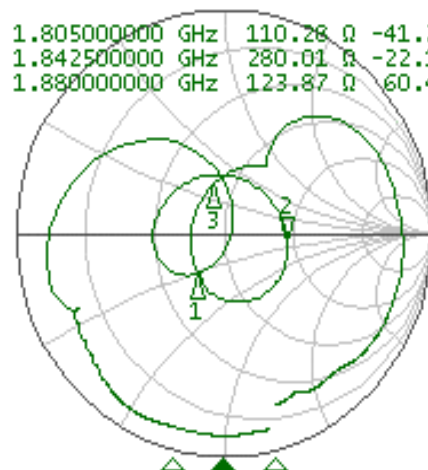
▶Tr1 Sss11 Smith (R+jX) Scale 1.000U [F4]

1	1.805000000 GHz	30.233 Ω	-9.7642 Ω
>2	1.842500000 GHz	27.302 Ω	-17.880 Ω
3	1.880000000 GHz	41.474 Ω	-22.391 Ω

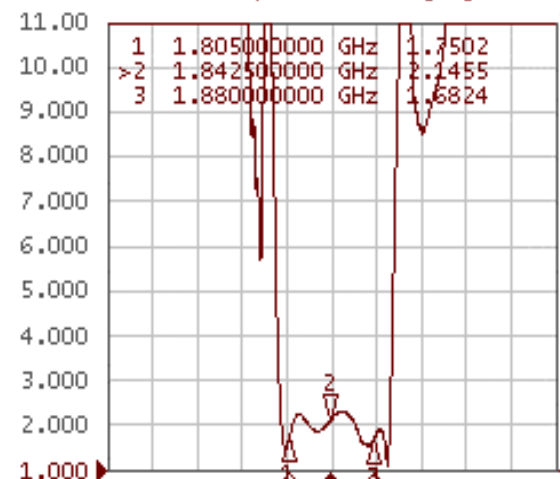


Tr3 Sdd22 Smith (R+jX) Scale 1.000U [F4]

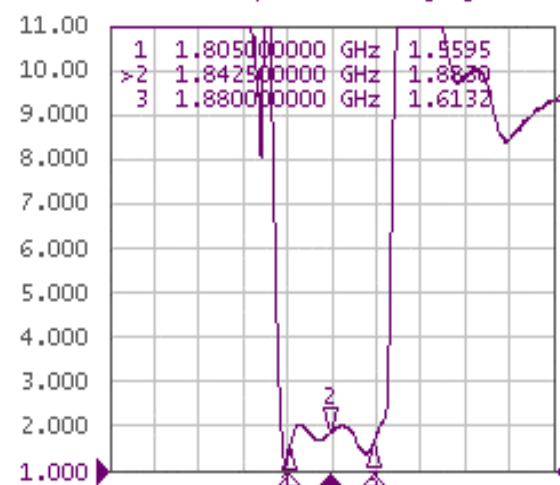
1	1.805000000 GHz	110.28 Ω	-41.750 Ω
>2	1.842500000 GHz	280.01 Ω	-22.156 Ω
3	1.880000000 GHz	123.87 Ω	60.400 Ω



Tr2 Sss11 SWR 1.000/ Ref 1.000 [F4]



Tr4 Sdd22 SWR 1.000/ Ref 1.000 [F4]



1 Center 1.8425 GHz

IFBW 30 kHz

Span 400 MHz

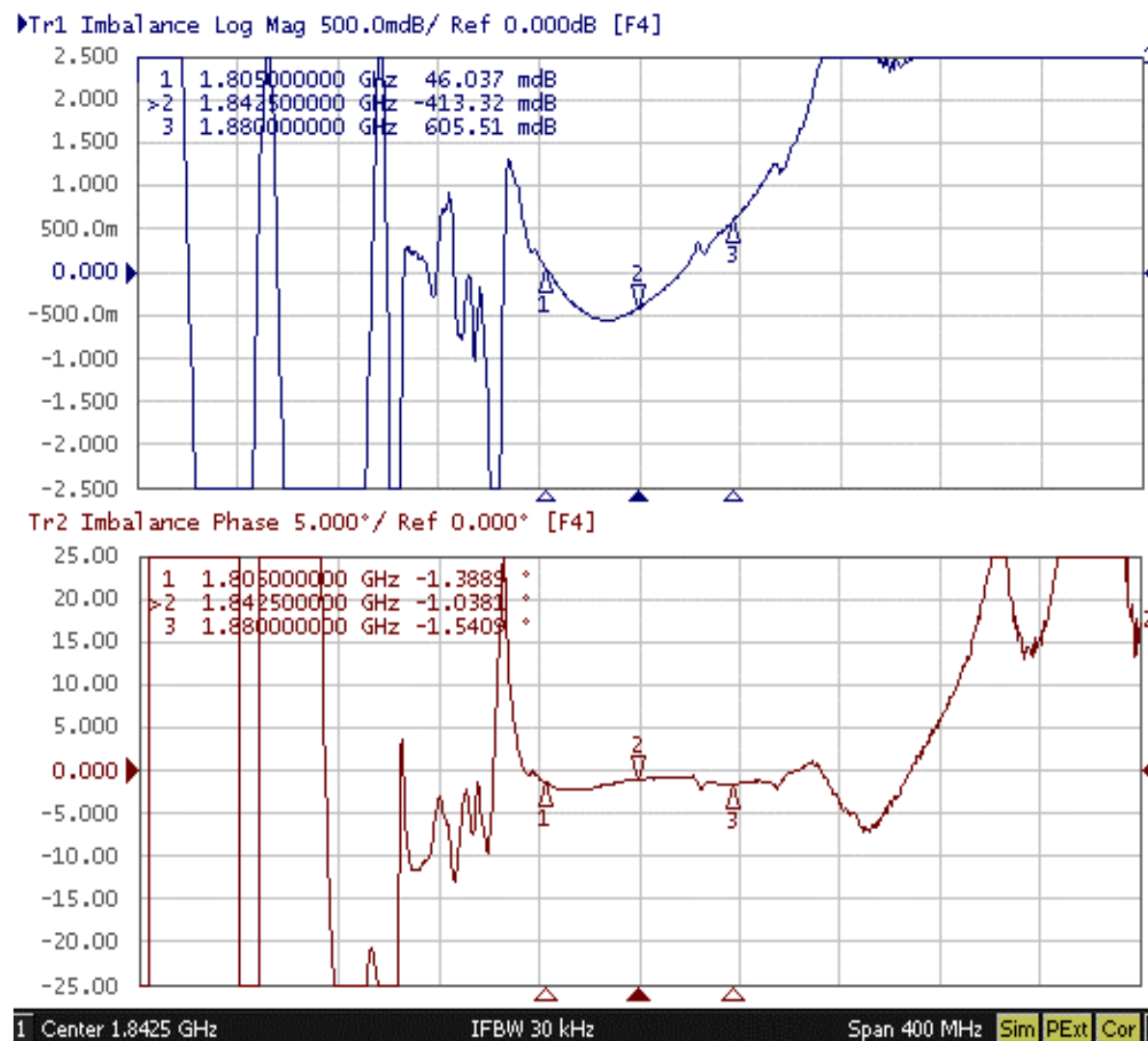
Sim PExt Cor

DCS1800 Rx SAW Filter

----- Unbalanced input and balanced output -----

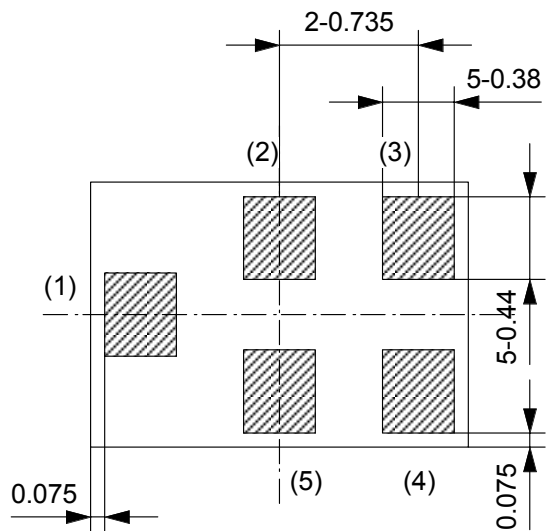
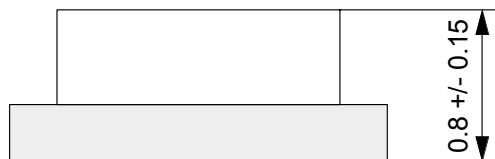
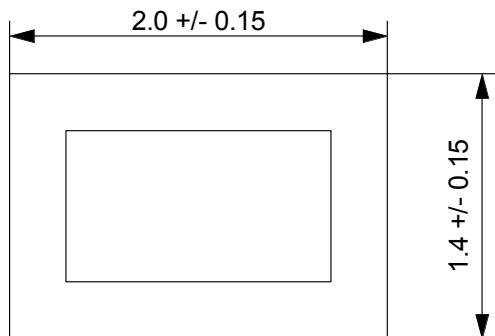
Part No. :

Design No. : T1842TMD



THIRD ANGLE PROJECTION

Tolerance : ± 0.05



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

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

DO NOT SCALE DRAWING

REVISIONS INDICATED BY Δ

ALL DIMENSIONS ARE IN MILLIMETERS

UNLESS OTHERWISE SPECIFIED

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

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DRAW		
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APPROVAL		
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TYPE NO.		

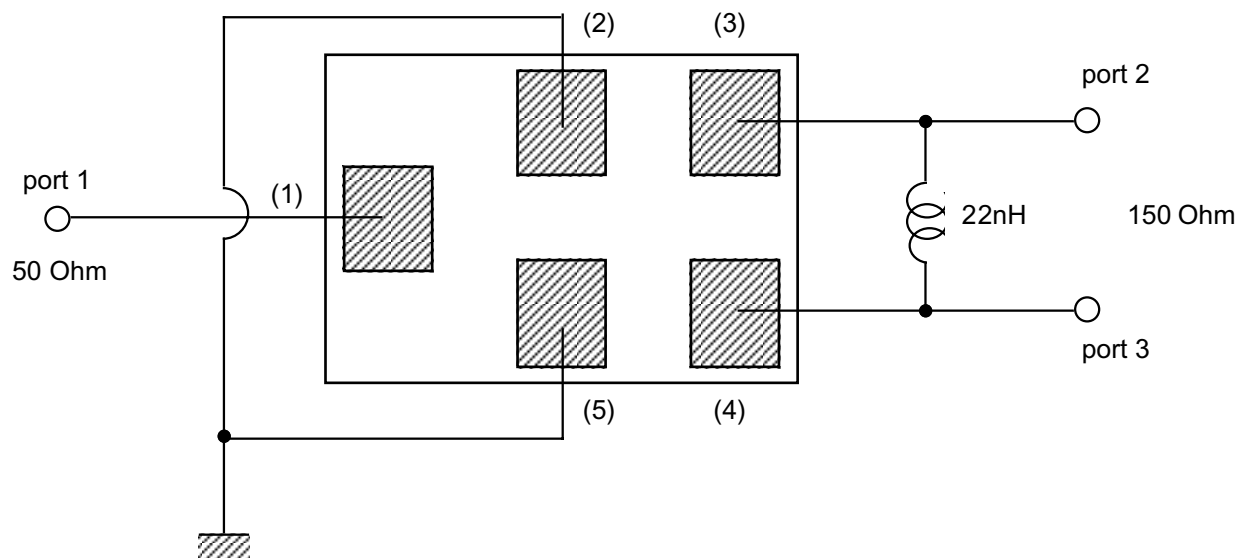
NAME _____

SAW Filter

TYPE NO.	
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Measurement Circuit



Input impedance : 50 Ohm (Single ended)
Output impedance : 150 Ohm (Differential)

Fig. 2

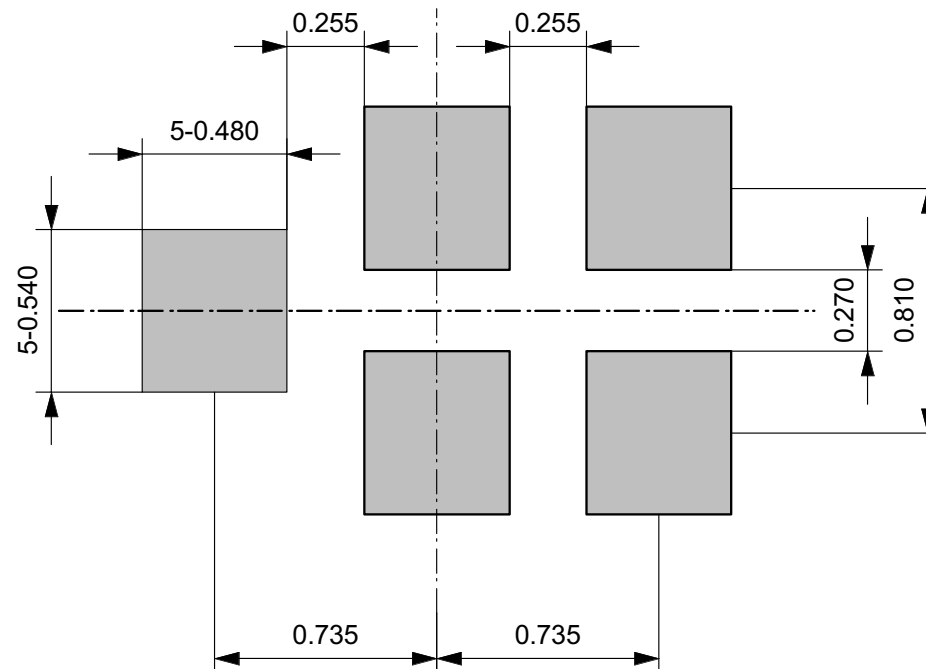
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UP TO	INCL	
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THIRD ANGLE PROJECTION

Recommended land pattern



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SAW Filter

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