

SPECIFICATION OF SAW FILTER

YOKETAN CORP.

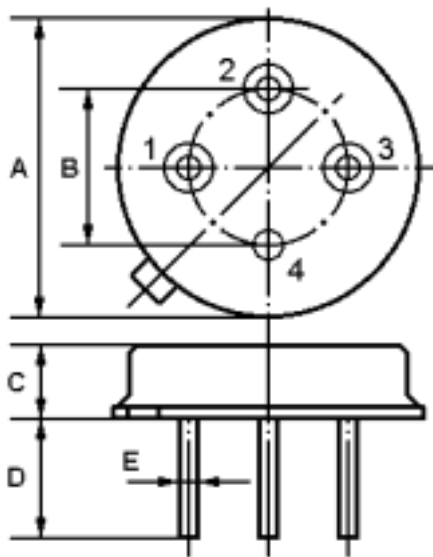
Spec no: TO39B-04795-2CH-NJ-A

1. Features

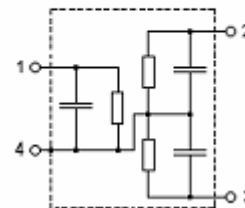
Two-channel SAW IF filter
For DBS receivers with constant group delay.

2. Type : TO39B

3. Product Dimension



Equivalent LC Model



Pin	Configuration
1	Input / Output
2	Output 2 / Input 2
3	Output 1 / Input 1
4	Ground

Sign	Data (unit: mm)	Sign	Data(unit: mm)
A	9.35±0.2	D	3.00±0.2
B	5.08±0.1	E	0.45±0.2
C	3.40±0.2		

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4. Performance

4-1. Maximum Ratings

Rating		Value	Units
AC Voltage Between Any Two Pins	V_{PP}	5	V
DC Voltage Between Any Two Pins	V_{DC}	0	V
Storage temperature range	T_{stg}	-40 to +85	
Operable temperature range	T_A	-25 to +85	

4-2. Electronic Characteristics

Reference temperature:	$T_A = 25$
Terminating source impedance:	$Z_S = 50 \Omega$
Terminating load impedance:	$Z_L = 50 \Omega$
Group delay aperture:	0.25 MHz

Channel 1

Item		Min	Typ	Max	Unit
Center Frequency	f_c	478.50	479.50	480.50	MHz
Insertion attenuation	479.50MHz α	--	21.8	24.0	dB
(Reference level for the following data)					
Passband width	$\alpha_{rel} \leq 3dB$ B_{3dB}	--	15.0	--	MHz
Relative attenuation	α_{rel}				
	472.00 MHz	--	3.1	5.0	dB
	487.00 MHz	--	3.0	5.0	dB
Lower sidelobe	430.00 ... 458.00 MHz	34.0	45.0	--	dB
Upper sidelobe	501.00 ... 530.00 MHz	34.0	44.0	--	dB
Reflected wave signal suppression		40.0	46.0	--	dB
0.15s ... 2.0 μ s after main pulse					
Amplitude ripple (p-p)	475.00 ... 484.00 MHz $\Delta\alpha$	--	0.6	1.2	dB
Group delay ripple (p-p)	472.00...487.00MHz $\Delta\tau$	--	10	15	ns
Temperature coefficient of frequency	TC_f	--	-86	--	ppm/K

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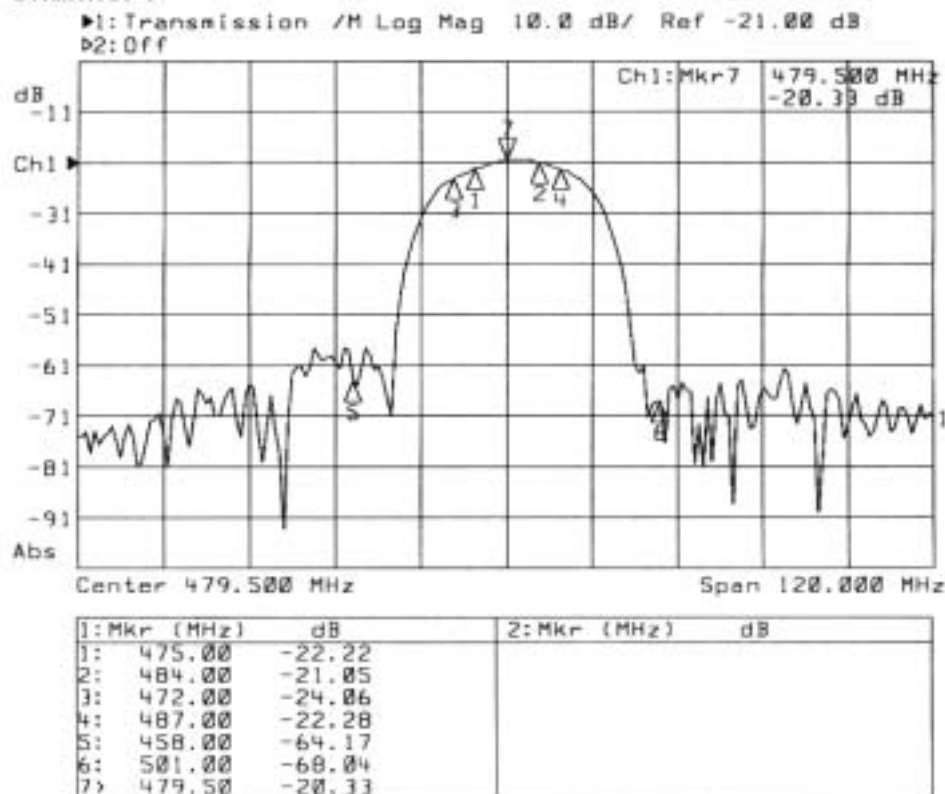
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Channel 2

Item	Min	Typ	Max	Unit
Center Frequency f_c	478.50	479.50	480.50	MHz
Insertion attenuation 479.50 MHz (Reference level for the following data)	--	22.0	24.0	dB
Pass bandwidth $\alpha_{rel} \leq 3\text{dB}$ $B_{3\text{dB}}$	--	27.0	--	MHz
Relative attenuation α_{rel}				
466.00 MHz	--	3.1	5.0	dB
493.00 MHz	--	2.7	5.0	dB
Lower sidelobe 430.00 ... 456.00 MHz	34.0	41.5	--	dB
Upper sidelobe 503.00 ... 530.00 MHz	34.0	41.5	--	dB
Reflected wave signal suppression 0.15 μs ... 3.0 μs after main pulse	40.0	44.0	--	dB
Amplitude ripple (p-p) 475.00... 484.00 MHz $\Delta\alpha$	--	0.6	1.2	dB
Group delay ripple (p-p) 466.00 493.00 MHz $\Delta\tau$	--	8	15	ns
Temperature coefficient of frequency TC_f	--	-86	--	ppm/K

5. Frequency Response

Channel 1



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Channel 2

