



Approved by:
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SPECIFICATION

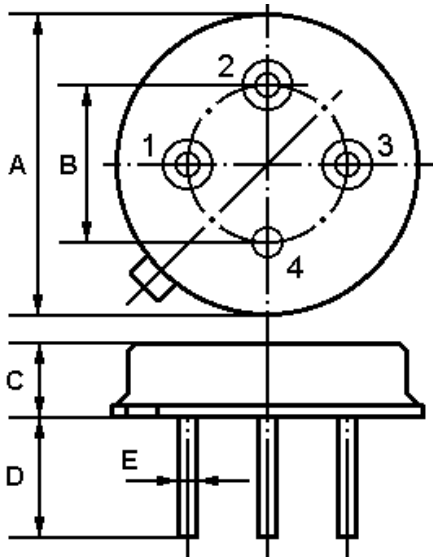
PRODUCT: SAW FILTER

MODEL: NMF479.5- 5 TO-39B

HOPE MICROELECTRONICS CO.,LIMITED

The NMF479.5-5 is an IF filter for DBS receivers with constant group delay.

1.Package Dimension (TO-39)



Pin	Configuration
1	Input / Output
2	Output 2 / Input2
3	Output 1 / Input1
4	Ground

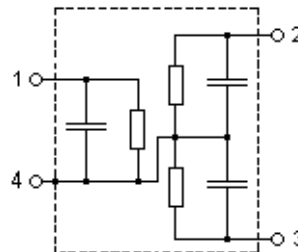
Dimensions	Data (Unit: mm)
A	9.35±0.10
B	5.08±0.10
C	3.40±0.10
D	3.00±0.20
E	4-Φ0.45±0.20

2.Marking

NMF479.5-5

Color: Black or Blue

3.Equivalent LC Model



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	°C
Operable temperature range	T_A	-25 to +85	°C

4-2.Electronic Characteristics

Reference temperature:	$T_A = 25 \text{ } ^\circ\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$
Terminating load impedance:	$Z_L = 50 \text{ } \Omega$
Group delay aperture:	0.25MHz

Characteristics of Channel1

Characteristic		Min.	Typ.	Max.	Units	
Center Frequency	f_C	478.50	479.50	480.50	MHz	
Insertion attenuation	479.50 MHz (Reference level for the following data)	α	--	21.8	24.0	dB
Pass bandwidth	$\alpha_{rel} \leq 3\text{dB}$	$B_{3\text{dB}}$	--	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	0.15s ... 2.0 μ s after main pulse	40.0	46.0	--	dB	
Amplitude ripple (p-p)	475.00 ... 484.00 MHz	$\Delta \alpha$	--	0.6	1.2	dB
Group delay ripple (p-p)	472.00 ... 487.00 MHz	$\Delta \tau$	--	10	15	ns
Temperature coefficient of frequency	TC_f	--	-86	--	ppm/K	

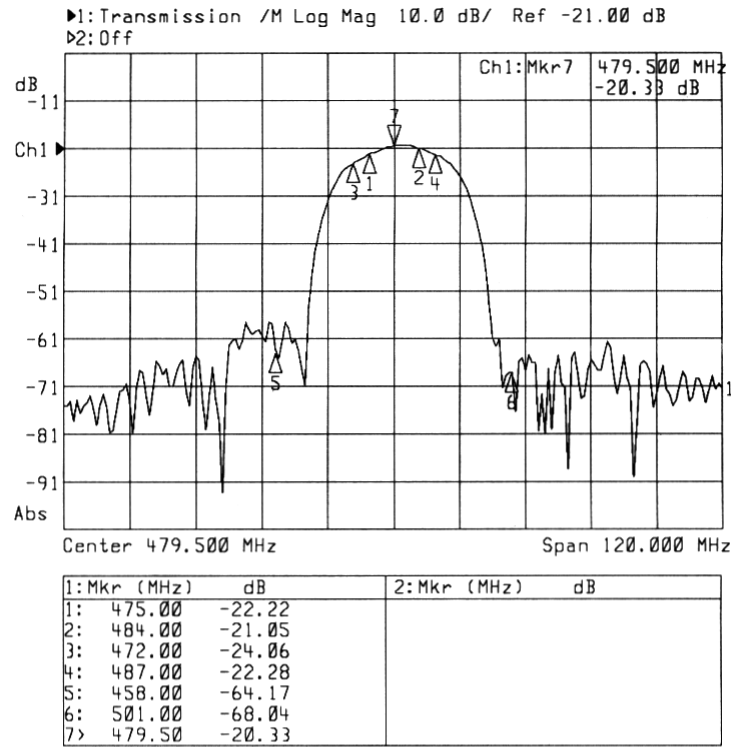
Characteristics of Channel2

Characteristic		Min.	Typ.	Max.	Units	
Center Frequency	f_C	478.50	479.50	480.50	MHz	
Insertion attenuation	479.50 MHz (Reference level for the following data)	α	--	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 μ s ... 3.0 μ s 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	

ⓘ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling!

5. Typical Frequency Response

Channel 1



Channel 2

