SPECIFICATION OF SAW FILTER

YOKETAN CORP.

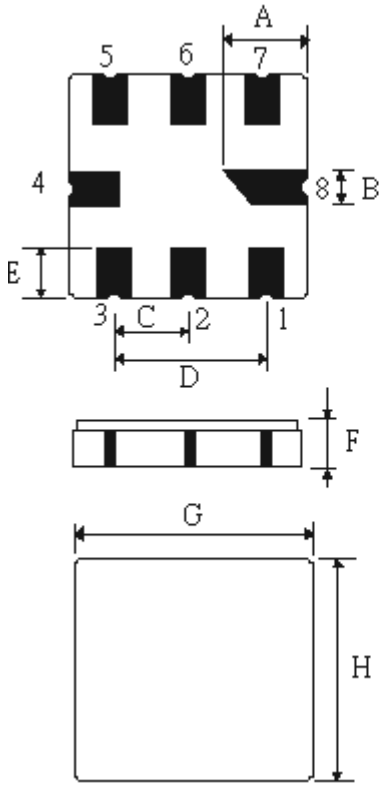
Spec no: SM5050F-04800-036-NJ-A

1. Features

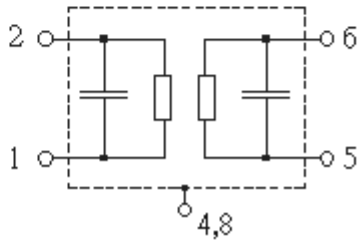
IF filter for DBS receivers with constant group delay.

2. Type : SM5050 (Lead Free Parts)

3. Product Dimension



Equivalent LC Model



Pin	Connection
2	Input
1	Input-ground
6	Output
5	Output-ground
3,7	To be Ground
4,8	Case Ground

Sign	Data (unit:mm)	Sign	Data(unit:mm)
A	2.08±0.15	E	1.2±0.15
B	0.60±0.1	F	1.35±0.15
C	1.27±0.1	G	5.0±0.2
D	2.54±0.1	H	5.0±0.2

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	-40 to +85	℃
Operable temperature range	-25 to +85	℃

4-2.Electronic Characteristics

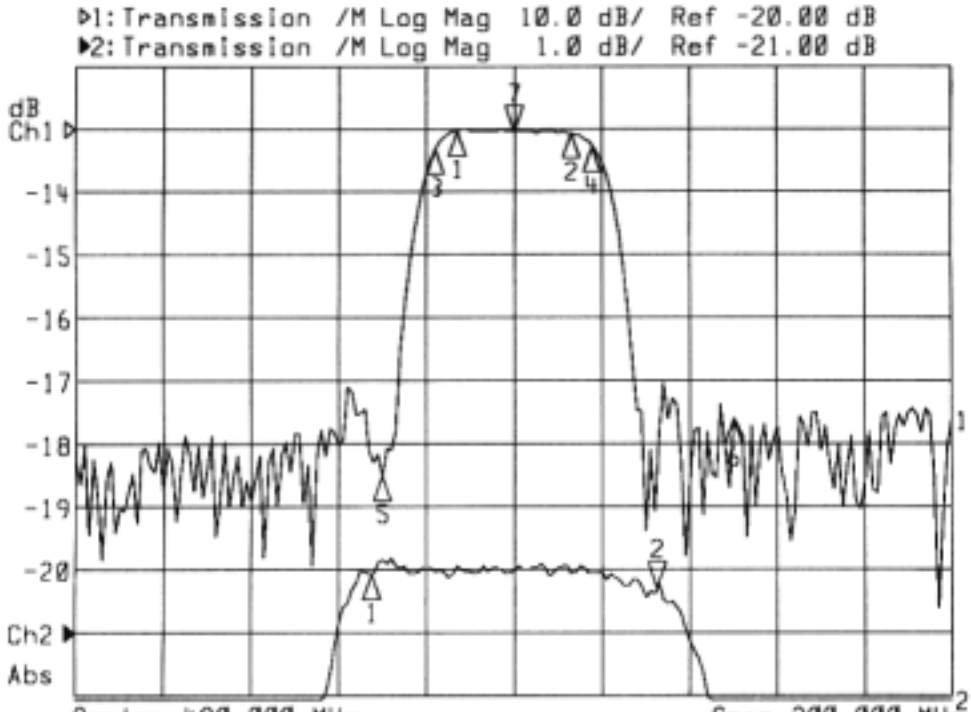
Reference temperature : T_A=25℃

Terminating source impedance Zs=50Ω

Terminating load impedance Z_L=50Ω

Item		Min	Typ.	Max	Unit
Center frequency	fc	479.00	480.00	481.00	MHz
Insertion attenuation 480MHz (Reference level for the following data)	α	--	21.0	22.5	dB
Pass bandwidth α rel≦3dB	BW_{3dB}	--	36	--	MHz
Relative attenuation	α_{rel}				
462.00 MHz		--	3.0	4.2	dB
498.00 MHz		--	2.9	4.2	dB
Lower sidelobe 430.00 ….450.00 MHz		36.0	42.0	--	dB
Upper sidelobe 510.00 … 530.00 MHz		36.0	42.0	--	dB
Reflected wave signal suppression 0.1 μs …. 2.0 μs after main pulse		40.0	48.0	--	dB
Amplitude ripple (p-p) 467.00 ….493.00MHz	△α	--	0.5	1.0	dB
Amplitude tilt 467.00 ….493.00MHz		--	0.02	--	dB/MHz
Group delay 480.00MHz	τ	--	274.0	--	ns
Group delay ripple(p-p) 466.50 ….493.50MHz	△τ	--	15	25	ns
Temperature coefficient of frequency	TC_f	-86			ppm/k

5. Frequency Response



1: Mkr (MHz)		dB
1:	467.00	-20.29
2:	493.00	-20.61
3:	462.00	-23.08
4:	498.00	-22.71
5:	450.00	-75.00
6:	530.00	-66.04
7>	480.00	-20.32

2: Mkr (MHz)		dB
1:	467.00	-20.06
2>	493.00	-20.28

6 Notice

Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture that is connected to a 50Ω test system with VSWR≤1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency, f_C. Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.