Approved by:
Checked by:
Issued by:

SPECIFICATION

PRODUCT: SAW FILTER

MODEL: HB3601D （X6857D） SIP5D

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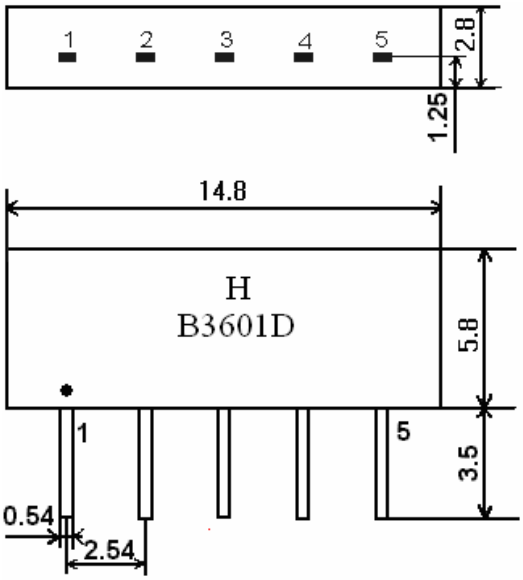
1.Construction

1.1 Dimension and materials

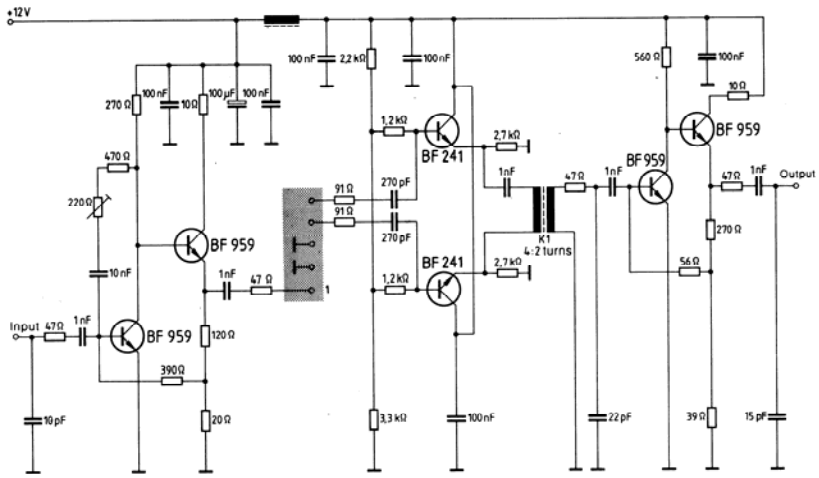
Type : B3601D



Unit : mm

1 Input
2 Input ground
3 Chip carrier - ground
4 Output
5 Output

1.2. Circuit construction, measurement circuit



Test circuit for SIP-5 filter
Input impedance of the symmetrical post-amplifier: 2 kΩ in parallel with 3 pF

2.Characteristics

Standard atmospheric conditions

Unless otherwise specified , the standard rang of atmospheric conditions for making measurements and tests is as follows;

Ambient temperature : 15℃ to 35℃
Relative humidity : 25% to 85%
Air pressure : 86kPa to 106kPa

Operating temperature rang

Operating temperature rang is the rang of ambient temperatures in which the filter can be
operated continuously. -10℃ ~ +60℃

Storage temperature rang

Storage temperature rang is the rang of ambient temperatures at which the filter can be stored without damage.
Conditions are as specified elsewhere in these specifications. -40℃ ~ +70℃

Reference temperature +25℃

2.1 Maximum Rating

DC voltage VDC	**12**	**V**	**Between any terminals**
AC voltage Vpp	**10**	**V**	**Between any terminals**

2.2 Electrical Characteristics

Source impedance Zs=50Ω
Load impedance Z_L=2kΩ//3pF T_A=25℃

Item		Freq	min	typ	max	
Center frequency		Fo	-	36.00	-	MHz
Insertion attenuation Reference level		36.00MHz	19.0	21.0	23.0	dB
Pass bandwidth		$B_{1.5dB}$	-	7.8	-	MHz
		B_{3dB}	-	8.1	-	MHz
		B_{15dB}	-	8.9	-	MHz
		B_{30dB}	-	9.4	-	MHz
Relative attenuation		31.65MHz	7.0	10.0	-	dB
		40.35MHz	7.0	10.0	-	dB
		31.30MHz	22.0	29.0	-	dB
		40.70MHz	22.0	29.0	-	dB
Sidelobe	25.00~31.00MHz		32.0	40.0	-	dB
	41.00~45.00MHz		30.0	38.0	-	dB
Temperature coefficient			-72			ppm/k

2.3 Environmental Performance Characteristics

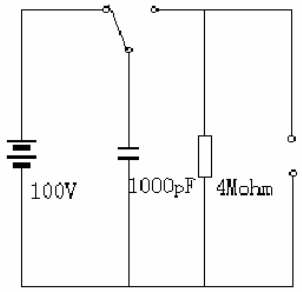
Item Test condition	Allowable change of absolute Level at center frequency(dB)
High temperature test 70℃ 1000H	< 1.0
Low temperature test -40℃ 1000H	< 1.0
Humidity test 40℃ 90-95% 1000H	< 1.0
Thermal shock	< 1.0

-20℃==25℃==80℃ 20 cycle 30M 10M 30M	
Solder temperature test Sold temp.260℃ for 10 sec.	< 1.0
Soldering Immerse the pins melt solder at 260℃+5/-0℃ for 5 sec.	More then 95% of total area of the pins should be covered with solder

2.4 Mechanical Test

Item Test condition	Allowable change of absolute Level at center frequency(dB)
Vibration test 600-3300rpm amplitude 1.5mm 3 directions 2 H each	<1.0
Drop test On maple plate from 1 m high 3 times	<1.0
Lead pull test Pull with 1 kg force for 30 seconds	<1.0
Lead bend test 90^{o} bending with 500g weigh 2 times	<1.0

2.5 Voltage Discharge Test

Item Test condition	Allowable change of absolute Level at center frequency(dB)
Surge test Between any two electrode 	<1.0

2.6 Frequency response：