

Approved by:
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SPECIFICATION

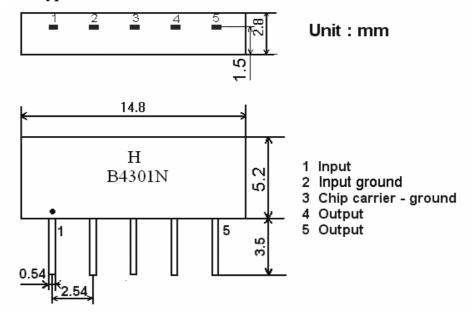
PRODUCT:	SAW	FILT	ER		
MODEL:	HB43	01N	(X6864D)	SIP5D	

HOPE MICROELECTRONICS CO.,LIMITED

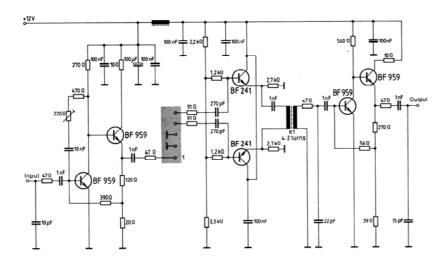
1.Construction

1.1 Dimension and materials

Type : B4301N



1.2. Circuit construction, measurement circuit



Test circuit for SIP-5 filter Input impedance of the symmetrical post-amplifier: 2 k $\!\Omega$ 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 $: 15^{\circ}\mathbb{C}$ to $35^{\circ}\mathbb{C}$ 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. $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$

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. $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$

Reference temperature

+25℃

2.1 Maximum Rating

DC voltage	VDC	12	V	Between any terminals
AC voltage	Vpp	10	\mathbf{V}	Between any terminals

2.2 Electrical Characteristics

Source impedance $Zs=50 \Omega$

Load impedance $Z_L=2k \Omega //3pF$ $T_A=25 ^{\circ}C$

		,, ep-			7 L	
Iten	1	Freq	min	typ	max	
Center fre	quency	Fo	-	43.75	-	MHz
Insertion att Reference		43.81MHz	13.2	15.2	17.2	dB
Pass bandwidth		$\mathrm{B}_{\mathrm{3dB}}$	1	6.2	1	MHz
r ass va	illawiatii	$\mathbf{B}_{30\mathrm{dB}}$	-	7.6	ı	MHz
Relative attenuation		40.71MHz	-	3.0	ı	dB
		46.91MHz	ı	2.2	ı	dB
	35.06~39.06MHz 39.06~39.76MHz		36.0	45.0		dB
Cidalaha			34.0	42.0		dB
Sidelobe 47.86~4		49.66MHz	34.0	42.0		dB
	49.66~	55.06MHz	36.0	46.0		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°C 1000H	< 1.0
Low temperature test -40°C 1000H	< 1.0
Humidity test 40°C 90-95% 1000H	< 1.0
Thermal shock $-20^{\circ}\text{C}==25^{\circ}\text{C}==80^{\circ}\text{C}$ 20 cycle 30M 10M 30M	< 1.0

Solder temperature test	< 1.0
Sold temp.260°C for 10 sec.	< 1.0
Soldering	More then 95% of total
Immerse the pins melt solder	area of the pins should
at 260°C+5/-0°C for 5 sec.	be covered with solder

2.4 Mechanical Test

Item	Allowable change of absolute
Test condition	Level at center frequency(dB)
Vibration test	
600-3300rpm amplitude 1.5mm	<1.0
3 directions 2 H each	
Drop test	×1.0
On maple plate from 1 m high 3 times	<1.0
Lead pull test	z1.0
Pull with 1 kg force for 30 seconds	<1.0
Lead bend test	<1.0
90° bending with 500g weigh 2 times	<1.0

2.5 Voltage Discharge Test

Item	Allowable change of absolute
Test condition	Level at center frequency(dB)
Surge test	
Between any two electrode	
100V 1000pF 4Mohm	<1.0

2.6 Frequency response:

