



Approved by:

Checked by:

Issued by:

SPECIFICATION

PRODUCT: SAW FILTER

MODEL: HF438901N (K3953N) SIP5D

HOPE MICROELECTRONICS CO., LIMITED

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°C ~ +60°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°C ~ +70°C

Reference temperature +25°C

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 $Z_s=50 \Omega$
 Load impedance $Z_L=2k \Omega //3pF$ $T_A=25^\circ C$

Item	Freq	min	typ	max	
Insertion attenuation Reference level	41.25MHz	12.1	14.1	16.1	dB
Relative attenuation	45.75MHz	-1.1	0.4	1.9	dB
	42.17MHz	22.0	32.0	-	dB
	39.75MHz	40.0	49.0	-	dB
	47.25MHz	40.0	52.0	-	dB
Sidelobe	35.00~39.75MHz	37.0	46.0	-	dB
	47.25~55.00MHz	35.0	42.0	-	dB
Temperature coefficient		-72			ppm/k

2.3 Environmental Performance Characteristics

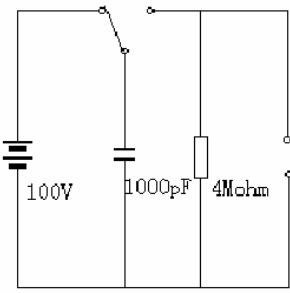
Item Test condition	Allowable change of absolute Level at center frequency(dB)
High temperature test 70°C 1000H	< 1.0
Low temperature test -40°C 1000H	< 1.0
Humidity test 40°C 90-95% 1000H	< 1.0

Thermal shock -20°C==25°C==80°C 20 cycle 30M 10M 30M	< 1.0
Solder temperature test Sold temp.260°C for 10 sec.	< 1.0
Soldering Immerse the pins melt solder at 260°C+5/-0°C 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° 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:

