

## 1. SCOPE

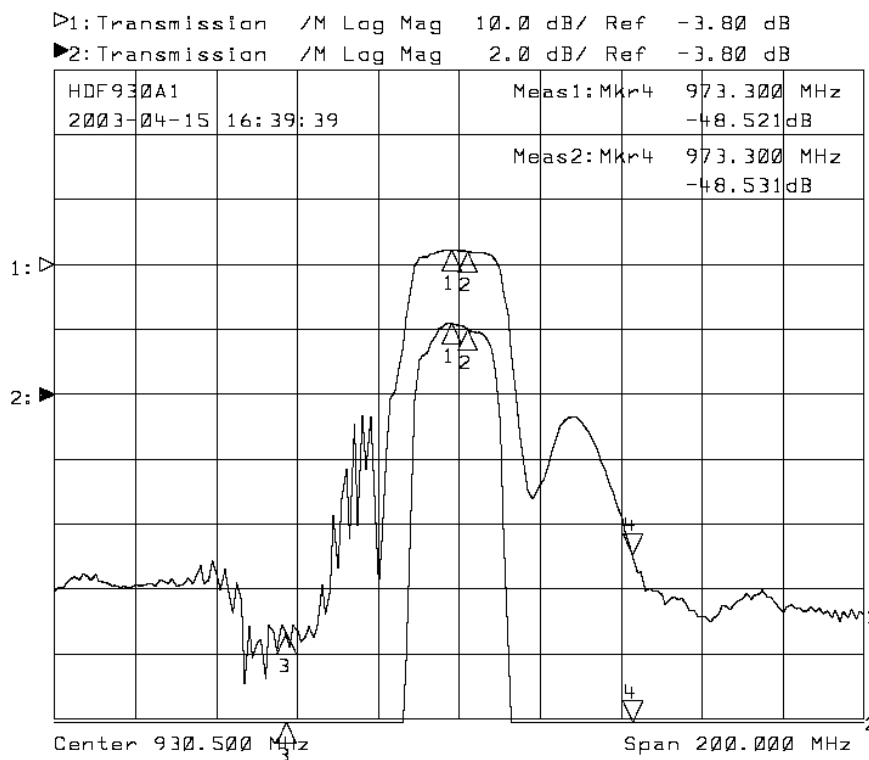
This specification shall cover the characteristics of SAW filter With F930A1 used for the page system.

## 2. ELECTRICAL SPECIFICATION

DC Voltage VDC	0V
AC Voltage Vpp	10V50Hz/60Hz
Operation temperature	-20°C to +60°C
Storage temperature	-45°C to +85°C
RF Power Dissipation	0dBm

### Electronic Characteristics

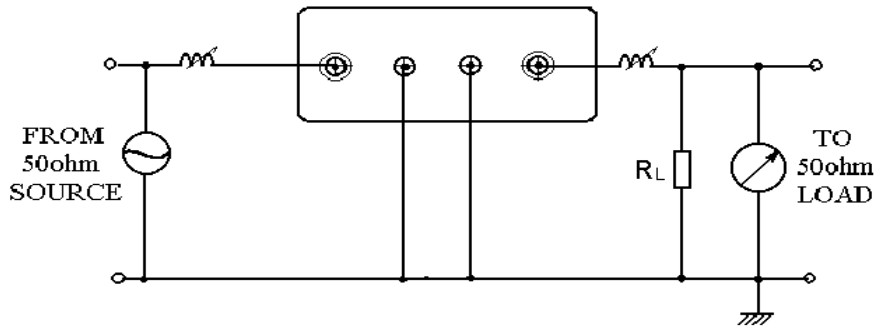
#### 2-1. Typical frequency response



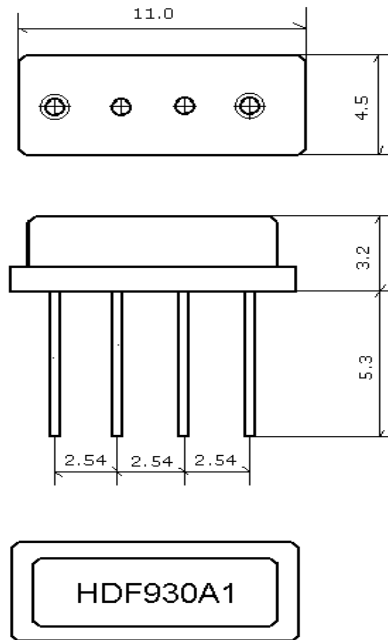
#### 2-2. Electrical characteristics

Part Number	LGEF930A1
Nominal center frequency(MHz)	930.5
Insertion loss(dB)	
1. Fo±2.0MHz	4.5 max.
2. Fo-400.0~-40.8MHz	45 min.
3. Fo+50.0~+400MHz	45 min.
Ripple deviation (Fo±2.0MHz)	2.0 max.
Input/output impedance (Nominal)	50+j52.8 ohm

### 3. TEST CIRCUIT



### 4. DIMENSION



### 5. ENVIRONMENTAL CHARACTERISTICS

#### 5-1 High temperature exposure

Subject the filter to +80°C for 96 hours. Then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in table 1.

#### 5-2 Moisture

Keep the filter at 40°C and 95% rh for 96 hours. then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in table 1.

**5-3 Low temperature exposure**

Subject the filter to  $-20^{\circ}\text{C}$  for 96 hours. Then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall fulfill the specifications in table 1.

**5-4 Temperature cycling**

Subject the filter to a low temperature of  $-55^{\circ}\text{C}$  for 30 minutes. Following by a high temperature of  $+85^{\circ}\text{C}$  for 30 Minutes. Then release the filter into the room conditions for 1 to 2 hours prior to the measurement. It shall meet the specifications in table 1.

**5-5 Resistance to solder heat**

Dip the filter terminals no closer than 1.5mm into the solder bath at  $270^{\circ}\text{C} \pm 10^{\circ}\text{C}$  for  $10 \pm 1$  sec. Then release the Filter into the room conditions for 1 to 2 hours. The Filter shall meet the specifications in table 1.

**5-6 Mechanical shock**

Drop the filter randomly onto the concrete floor from the height of 30cm 3 times. the filter shall fulfill the specifications in table 1.

**5-7 Vibration**

Subject the filter to the vibration for 1 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 hz. The filter shall fulfill the specifications in table 1.

**5-8 Lead fatigue****6-8-1 Pulling test**

Weight along with the direction of lead without an shock 3 kg. The filter shall satisfy all the initial Characteristics.

**6-8-2 Bending test**

Lead shall be subject to withstand against  $90^{\circ}\text{C}$  bending in the direction of thickness. This operation shall be done toward both direction. The filter shall show no evidence of damage and shall satisfy all the initial electrical characteristics.

**6. REMARK****6.1 Static voltage**

Static voltage between signal load & ground may cause deterioration & destruction of the component. Please avoid static voltage.

**6.2 Ultrasonic cleaning**

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning

**6.3 Soldering**

Only leads of component may be soldered. Please avoid soldering another part of component.