

Approved by:

Checked by:

Issued by:

SPECIFICATION

PRODUCT: SAW FILTER

MODEL: HD F457AS3



SHOULDER ELECTRONICS LIMITED

1. SCOPE

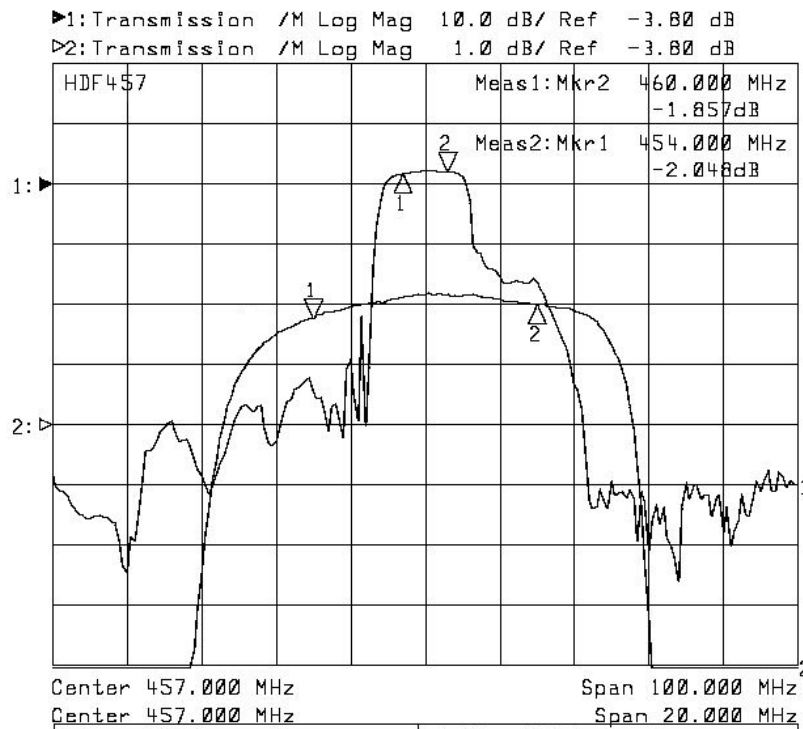
This specification shall cover the characteristics of SAW filter With F457A used for the page system.

2. ELECTRICAL SPECIFICATION

| | |
|-----------------------|----------------|
| DC Voltage VDC | 10V |
| 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

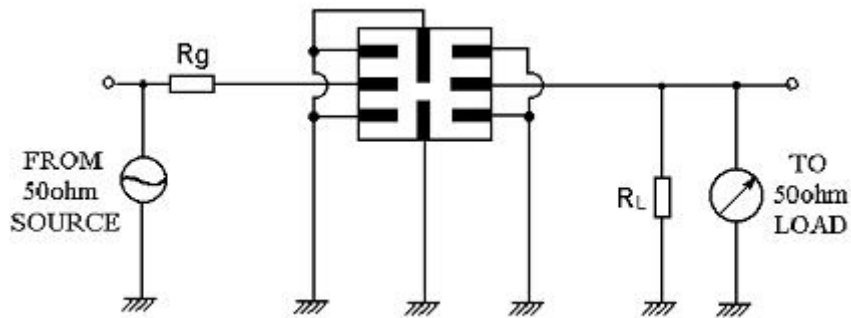


2-2. Electrical characteristics

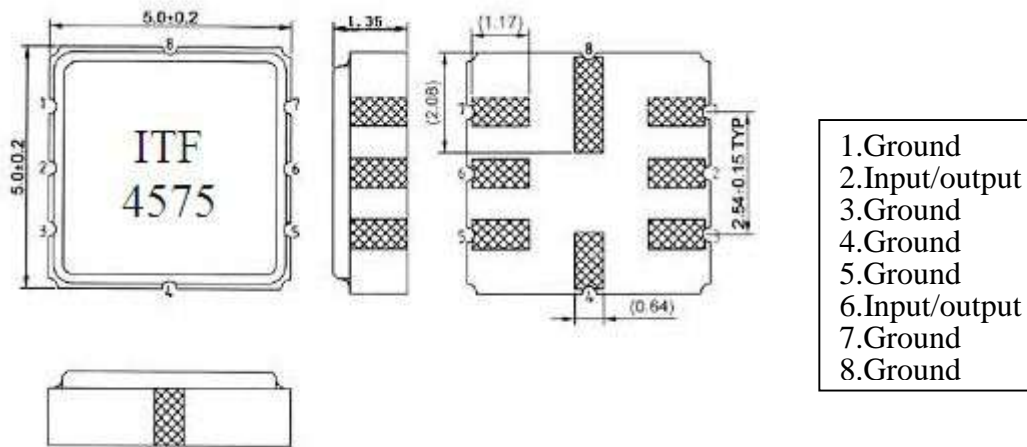
| Part number | F457A | Unit |
|---------------------------------|---------|------|
| Nominal center frequency (Fo) | 457 | MHz |
| Insertion Loss | | |
| 1.fo-45.8~fo-39.8 MHz | 45min. | dB |
| 2.fo ± 3.0 MHz | 4.5max. | |
| 3.fo +39.8~ fo +45.8MHz | 45min. | |
| Ripple (with Fo ± 3.0MHz) | 2.0max | dB |
| Input/Output Impedance(Nominal) | 50//0 | Ω/pF |

(Note: Operating temperature Range:-20°C to +60°C)

3. TEST CIRCUIT



4. DIMENSION



5. ENVIRONMENTAL CHARACTERISTICS

5-1 High temperature exposure

Subject the device to +85°C for 16 hours. Then release the filter into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in table 1.

5-2 Low temperature exposure

Subject the device to -20°C for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in table 1.

5-3 Temperature cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of +80°C for 30 Minutes. Then release the device into the room conditions for 24 hours prior to the measurement. It shall meet the specifications in table 1.

5-4 Resistance to solder heat

Dip the device terminals no closer than 1.5mm into the solder bath at 260°C ±10°C for 10±1 sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in table 1.

5-5 Solderability

Subject the device terminals into the solder bath at $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5s, More than 95% area of the terminals must be covered with new solder. It shall meet the specifications in table 1.

5-6 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1m 3 times. the device shall fulfill the specifications in table 1.

5-7 Vibration

Subject the device 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 device shall fulfill the specifications in table 1.

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.