

1. SCOPE

(范围)

This specification is applied to the ceramics filter used for AM receiver

(本规格书适用于 AM 收音机用陶瓷滤波器。)

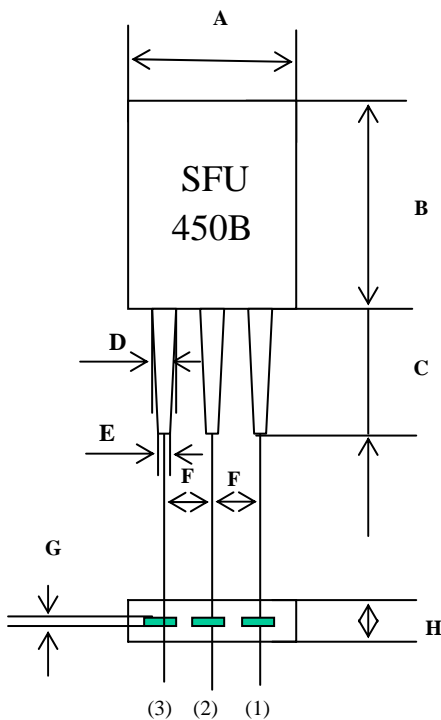
2. MODEL NAME

(产品名称)

Part Name (型号)	Customer's Part Number (客户型号)	Drawing No. (图号)
SFU450B		GG-076

3. DIMENSIONS

(尺寸)



UNIT : MM

A	7.0 ± 0.3
B	9.0 ± 0.3
C	5.0 ± 1.0
D	0.9 ± 0.1
E	0.7 ± 0.1
F	2.5 ± 0.2
G	0.15 ± 0.03
H	3.6 ± 0.3

(1). INPUT

(2). GROUND

(3). OUTPUT

5. ELECTRICAL CHARACTERISTICS

(电气性能)

	Item (项目)		Requirements (要求)
5-1	Center Frequency (fo) (中心频率)		457±2.0KHZ
5-2	3 dB Bandwidth (3dB 带宽)		10±3KHZ
5-3	Slectivity (选择性)	f0-9KHZ f0+9KHZ	6 dB min 4 dB min
5-4	Insertion Loss (插入损耗)		5.0 dB max (at minimum loss point)
5-5	Passband Ripple (带内波动)		0 dB
5-6	Stop band attenuation (阻带)		9 dB min
5-7	Withstanding Voltage (耐电压)		DC 50V
5-8	Temperature Coefficient Of Center Frequency (-20~+80℃)		±1.5khz max
5-9	input/output Impedance (输入输出阻抗)		3.0 kΩ

Note:

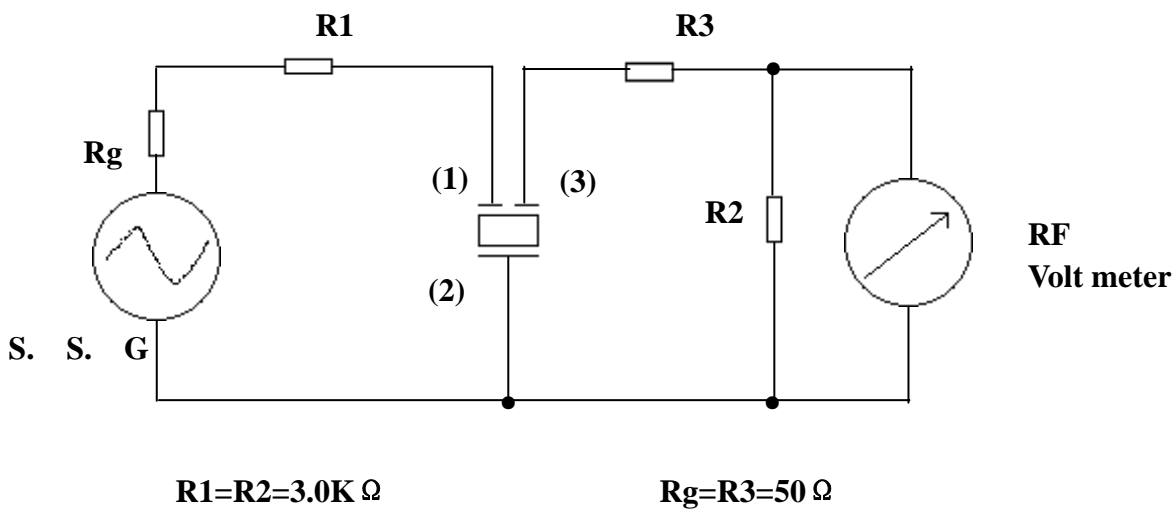
- Center frequency shall be define as the center value of the band at 3 dB.
- temperature coefficient of center frequency is based on the center frequency at 25℃.

4. TEST CIRCUIT

(测试电路)

Parts shall be measured under a condition (Temp.:3~35°C . Hum.:45~85%) unless any necessity to measure under a standard condition (Temp.:20 ± 2°C. Humi.:65 ± 5%) is occurred.

(测量条件为温度 3~35°C，相对湿度 45~85%，必要时标准测量条件为温度 20 ± 2°C，相对湿度 65 ± 5%)



(1). Input (2). Ground (3). Output

6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

(物理及环境特性)

	Test Item (试验项目)	Condition of Test (试验条件)	Requirements (要求)
6-1	Lead Strength (引脚强度) Lead Pulling (引脚拉力) Lead Bending (引脚弯曲)	Applied to vertical weight 1Kg along with the direction of lead without any shock for 5-10sec. (沿引线方向加 10 牛顿静载荷 5-10 秒.) Filter lead shall be subjected to withstand against 90° bending its stem.This opration shall be done toward both diretion. (引脚折弯 90° ,反方向同样。)	No mechanical damage and the measured values shall meet Item 5. (无机械损伤, 测量值足第 5 款要求.)
6-2	Solderability (可焊性)	Dip the terminals of the filter no closer than 1.5mm into a soldering bath(230±5°C) for 5±1 sec . (refer to MIL-STD-202E-208C) (端子至少 1.5mm 应浸没在 (230±5°C) 锡池内 5±1 秒。)	The solder shall be for coat at least 95% of the terminal surface (端子表面 95%被浸润)
6-3	Vibration (振动)	Filter shall be measured after being applied vibration as below (在下面条件下振动后测试) Vibration Freq: 10-55HZ (振动频率) Amplitude : 1.5 mm (幅度) Directions : 3 axial directions (方向) (3 轴向) Time : 1 hour/each direction (时间) (1 小时/各方向)	Novisible damage and the measured value shall meet table 1 (无可见损伤且测量值满足表 1)
6-4	Random Drop (任意跌落)	Filter shall be measured after 3 times random dropping from the height of 30 cm. concrete floor. (3 次 30 cm 高度跌落到水泥地板后测试)	
6-5	Resistance to Soldering Heat (耐焊接热)	Filter immersing the terminals up to 1.5 mm to filter's body in soldering bath (350 ±10°C) for 3 sec., filter shall be measure after being placed in natural condition for 1 hour. (端子在 (350±10°C) 锡池内浸没到器件根部 1.5mm, , 时间 3 秒, 自然条件放置 1 小时后测试。)	The measured value shall meet table 1. (测量值满足表 1)

6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS (续上页)

(物理及环境特性)

	Test Item (试验项目)	Condition of Test (试验条件)	Requirements (要求)
6-7	Humidity (湿度)	After being placed in a chamber (Humidity: 90-95% RH Temp.: $40 \pm 2^{\circ}\text{C}$) for 100 hours filter shall be measured after placed in natural condition for 1 hour (相对湿度 90-95% 温度 $40 \pm 2^{\circ}\text{C}$ 容器中放置 100 小时, 自然条件放置 1 小时后测试。)	The measured value shall meet Table 1. (测量值应满足表 1)
6-8	Life Test (High temperature) (寿命试验) (高温)	After being placed in a chamber $85 \pm 2^{\circ}\text{C}$ for 100 hours ,filter shall be measured after being placed in natural condition for 1 hour. (温度 $85 \pm 2^{\circ}\text{C}$ 容器中放置 100 小时, 自然条件放置 1 小时后测试。)	
6-9	Life Test (Low temperature) (寿命试验) (低温)	Placed in a chamber (Temp: $-55 \pm 2^{\circ}\text{C}$) for 100 hours, filter shall be measured placed in natural condition for 1 hour . (温度 $-55 \pm 2^{\circ}\text{C}$ 容器中放置 100 小时, 自然条件放置 1 小时后测试。)	
6-10	Thermal Shock (温度冲击)	After temperature cycling of -55°C (30 minutes) to $+85^{\circ}\text{C}$ (30 minutes) was performed 5 times with a transfer time 15 min filter shall be measured after being placed in natural condition for 1 hour. (温度 -55°C (30 分钟) 至 $+85^{\circ}\text{C}$ (30 分钟) 循环 5 次, 15 分钟 1 次, 自然条件放置 1 小时后测试。)	

6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS (续上页)
(物理及环境特性)**Table 1**
(表 1)

Item (项目)	Limit Value (极限值)
※ Center Frequency (中心频率)	± 1.0 kHz max
※ 3 dB Bandwidth (3dB 带宽)	± 1.0 kHz max
※ Insertion Loss (插入损耗)	± 5.0 dB max

※ **Note: The limits in the above table are referenced to the initial Measurements.** (表中的限值参照初始测量值)

7. NOTICE

(注意)

- 7.1 Ceramic filter should be stored in storeroom .And the surrouding atmosphere is acidless,alkali-free and no other harmful impurity.**
(器件应贮藏在贮藏室,周围环境无酸、碱性腐蚀或其它有害气体.)
- 7.2 The package for ceramic filter should be avoid the hit by rain and Snow,also the mechanical damage.**
(包装应避免风雪、雨水的侵袭以及机械伤害。)
- 7.3 This specification limits the quality of the component as a single unit .Please make sure that the component is evaluated and confirmed the drawing When it is mounted to your product.**
(本规格书只规定了部件本身的质量。应用于您的产品时。请确认图纸该部件是否等效。)