### B SHOULDER

规格书编号 SPEC NO:

## 产品规格书 SPECIFICATION

CUSTOMER 客户:_			
PRODUCT 产品:	(	CERAMIC FILTER	
MODEL NO 型 号:_		SFU455B	
PREPARED 编制:	LEO	CHECKED 审 核:	YORK
APPROVED 批 准:	LIUMING	D A T E 日 期:	2012-7-16

客户确认 CUSTOMER RECEIVED:			
审核 CHECKED	批准 APPROVED	日期 DATE	

无锡市好达电子有限公司 Shoulder Electronics Limited



### 更改历史记录 History Record

更改日期 Date	规格书编号 Spec No	产品型号 Part No	客户产品型号 Customer No	更改内容描述 Modify Content	备注 Remark

### CERAMIC FILTER

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 SCOPE THIS SPECIFICATION SHALL COVER THE CHARACTERISTICS OF THE CERAMIC FILTER WITH 460kHz.
SPECIFICATION NO. : QJ/A4•06•0403
PART NO. : SFU455B
ELECTRICAL SPECIFICATIONS
ELECTRICAL SPECIFICATIONS
I CENTRE FREQUENCY (F<sub>0</sub>) : 460 ±2 KHz
BAND WIDTH AT (3 dB) : 10 ± 3 KHz

+.2 DIM D $(10111111 (5  d D))$	•	$10 \pm 5$ KHZ
4.3 SELECTIVITY (F° - 9KHz)	:	6 dB min.
$(F_{\circ} + 9KHz)$	:	5 dB min.
4.4 STOP BAND ATTENUATION	:	10 dB min.
4.5 RIPPLE	:	0 dB
4.6 INSERTION LOSS	:	5 dB max

4.7 TEMPERATURE COEFFICIENT

OF CENTER FRENQUENCY :  $\pm 1.5$ KHz max.(-20 TO +80°C)

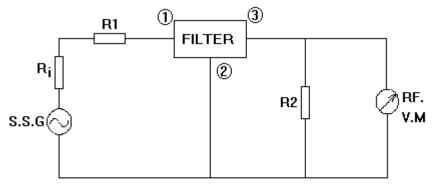
4.8 INPUT/OUTPUT IMPEDANCE :  $3 \text{ K} \Omega$ 

NOTE : 1) CENTER FREQUENCY SHALL BE DEFIED AS THE CENTRAL VALUE OF THE BAND WITH AT 3 dB

- 2) TEMPRATURE COEFFICIENT OF CENTER FREQUENCY SHALL BE DEFINED AS THE AVERAGE OF THE CENTRAL FREQUECY SHIFT THROUGHOUT THE SPECIFIED TEMPERATURE RANGE.
- 5 MEASUREMENT
- 5.1 ENVIRONMENTAL CONDITION

MEASUREMENT SHALL BE CARRIED OUT AT THE REFERENCE TEMPERATURE OF  $25^{\circ}$ C  $\pm 2^{\circ}$ C. IT SHALL BE POSSIBLY DONE AT  $5^{\circ}$ C TO  $35^{\circ}$ C UNLESS IT IS QUESTIONABLE.

5.2 MEASUREMENT CIRCUIT



Ri +R1 = R2 = 3K Ω ① Input ② Ground ③ Output

# CERAMIC FILTER

Recommended if I	(/ mm	Square	)
Item Type	SFU455B		3
Winding Specification	1-2	2-3	4-5
1 2 3 From bottom	70T	115T	7T
Unloaded Qu		105	1
Tuning Capacity		180PF	

Recommended IFT (7mm Source)

- 6. ENVIRONMENTAL CHARACTERISTICS
- 6-1 MOISTURE

KEEP THE FILTER AT  $40^{\circ}C \pm 2^{\circ}C$  and  $90 \sim 95\%$  RH For  $96 \pm 4$  Hours. Then, release the filter into the room conditions for 2 Hour prior to the measurement. It shall fulfill the Specifications in Table 1.

#### 6-2 VIBRATION

SUBJECT THE FILTER TO THE VIBRATION FOR 1 HOUR EACH IN THE X,Y AND Z AXES WITH THE AMPLITUDE OF 1.5 mm AT 10 ~ 55 Hz. IT SHALL FULFILL THE SPECIFICATIONS IN TABLE 1.

6-3 MECHANICAL SHOCK

DROP THE FILTER RANDOMLY ONTO A CONCRETE FLOOR FROM THE HEIGHT OF 30cm 3 TIMES. IT SHALL FULFILL THE SPECIFICATIONS IN TABLE 1 .

6-4 RESISTANCE TO SOLDER HEAT

DIP THE FILTER TERMINALS NO CLOSER THAN 1.5mm INTO THE SOLDER BATH AT 260 °C  $\pm$  5 °C FOR 5 $\pm$ 1SEC. THE FILTER SHALL MEET THE SPECIFICATIONS IN TABLE 1.

#### 6-5 SOLDERABILITY

DIP THE FILTER TERMINALS NO CLOSER THAN 1.5mm INTO THE SOLDER BATH AT  $245^{\circ}$ C  $\pm 5^{\circ}$ C FOR  $3\pm 0.5$  SEC. MORE THAN 90% OF THE TERMINAL SURFACE OF THE FILTER SHALL BE COVERD WITH FRESH SOLDER.

#### 6-6 HIGH TEMPERATURE STORAGE

SUBJECT THE FILTER TO +80  $\pm 5$ °C FOR 96  $\pm 4$  HOURS. THEN, RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOUR PRIOR TO THE MEASUREMENT. IT SHALL MEET THE SPECIFICATIONS IN TABLE 1.

6-7 LOW TEMPERATURE STORAGE

SUBJECT THE FILTER TO -20  $\pm$ 5°C FOR 96  $\pm$ 4HOURS. THEN, RELEASE THE FILTER INTO THE ROOM CONDITIONS FOR 2 HOUR PRIOR TO THE

#### SFU455B

### CERAMIC FILTER

MEASUREMENT. IT SHALL MEET THE SPECIFICATIONS IN TABLE 1. 6-8 TEMPERATURE CYCLING

SUBJECT THE FILTER TO A LOW TEMPERATURE OF -20°C FOR 30 MINUTES. FOLLOWED BY A HIGH TEMPERATURE OF +80°C FOR 30 MINUTES. CYCLING SHALL BE REPEATED 5 TIMES WITH A TRANSFER TIME 15 MINUTES AT THE ROOM CONDITIONS.THEN, RELEASE THE FILTER INTO THE ROOM TEMCONDITIONS FOR 2 HOUR PRIOR TO THE MESUREMENT. IT SHALL MEET THE SPECIFICATIONS IN TABLE 1.

6-9-1PULLING TEST

WEIGHT ALONG WITH THE DIRECTION OF LEAD WITHOUT AN SHOCK 1 KG. THE FILTER SHALL SHOW NO EVIDENCE OF DAMAGE AND SHALL SATISFY ALL THE INITIALL ELECTRIC CHARACTERISTICS.

6-9-2 BENDING TEST

LEAD SHALL BE SUBJECTED TO WITHSTAND AGAINST 90° BENDING IN THE DERECTION OF THICKNESS. THIS OPERATION SHALL BE DONE TOWARD BOTH DIRECTION. THE FILTER SHALL SHOW NO EVIDENCE OF DAMAGE AND SHALL SATISFY ALL THE INIT IAL ELECTRICAL

7. DIMENSIONS(mm)

