SPEC NO.: CU-002SDIP

Specification

TO:STE508

Model Name: Ceramic filter

PART NO: CDBM450C18

CUSTOMER PART NO.: Murata CDBM450C18

Approval sheet:

Approved	Yes No.

Customer's comments are welcomed here.

Pls return this copy as a certificate of your approval by Fax.

Approved By Date: _____

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History Record

Date	Part No.	SPEC No.	Discription.	Remarks.
RoHS Compliant Lead free Lead-free soldering	ISO9001:2000 ISO14001:2004	**Approved by**	**Check by**	**Design by**
		May-15-2007	**May-10-2005**	**Jan-16-1999**
Reversions	**Total Page**	Xu gang dong	Liu jun	Wang hon

1. Application

This specification is applicable to ceramic discriminator CDBM450C18 use for quadrature detection with IC:MC3372(MOTOROLA).

2. Electrical Characteristics

This discriminator must need following performance when tested in the circuit indicated in Pig.2.

2-1) Demodulated 3dB Bandwidth : ±4.0 kHz. (from 450 kHz)

2-2) Demodulated Output : 180±40mV. (at 450 kHz)

2-3) Demodulated Distortion Factor : 3.0%Max.

2-4) Withstand Voltage : D.c. 50V for 1 minute.

3. Test Method

Input signal condition

Input level : 80dBμ

Frequency Deviation : ±1.5 KHz

Modulation Frequency : 1.0 KHz

3-1) Demodulated 3dB Bandwidth

Input the above signal and sweep the carrier around 450 KHz, and find Out the maximum audio output frequency. Then sweep the carrier frequency again and find two frequencies, which are observed –3dB attenuation points from the maximum point.

Higher frequency point is called (f1) and lower called (f2). (f1-450KHz) is defined as upper 3dB bandwidth and (450KHz-f2) defined as lower 3dB bandwidth.

3-2) Demodulate Output

Demodulated output shall be measured when carrier frequency is adjusted to 450KHz.

3-3) Demodulated Distortion Factor

Carrier frequency is adjusted to 450KHz.

And distortion shall be measured with 1 KHz modulation frequency.

4. Environmental Test

4-1) Temperature Characteristics

At the temperature range of 25±5℃,the discriminators shall meet the electrical properties in item 2-1~2-4,and at –20~+80℃ the Anti-resonant frequency shall not very more than ±2.0 KHz.

4-2) Vibration

The discriminators shall suffer no mechanical damage and meet the 2-1~2-4 electrical Characteristics after being vibrated with a sine wave motion having an

amplitude of 1.0 mm from 10 to 55KHz per 1 minute, applied for 30 minutes in three different directions (x,y,z).

4-3) Humidity

The discriminators shall be place in a humidity chamber at 90~95% relative humidity and 40~45℃ for a period of minimum 8 hours. The discriminators shall be left for the period of more than 24 hours at the room temperature after its removal from the humidity chamber.The discriminators shall meet the 2-1~2-4 electrical characteristics and the appearance of discriminators is to be normal.

4-4) Dropped Shock

The discriminators shall suffer no mechanical damage and meet the 2-1~2-4 electrical characteristics outlined on this specification after being dropped 3 times to concrete floor from the 30 cm height.

4-5) Solderability

The terminal surface shall be covered over 3/4 by the solder after dipped the leads into 230±5℃ solder pot containing (Sn 63% Pb 37%) molten alloy for 3 ±1 seconds.

4-6) Soldering Heat-Resistance

The discriminators shall be assembled to the 1 mm “through-hole” P.C. bored and placed in solder solution (Sn63% Pb37%) at 250±10℃ for duration of 3±1 seconds. After removal from the solder solution chamber, the discriminators may be cleaned with chlorothene and left for more then 24 hours at the room temperature. The discriminators shall meet the 2-1~2-4 electrical characteristics is to be normal.

4-7) Lead Strength

The discriminators shall suffer no mechanical damage and meet the 2-1~2-4 electrical characteristics outlined on this specification after static load of 1.0 kg for 1 minute is applied in the direction of the insertion side.

4-8) Temperature

The discriminators shall be held at each cycle consist of three temperature levels(-20,+25,+80℃) for a period of each 30 minute and repeated 3 cycles. After the test the discriminators may be left for more than 24 hours at the room temperature. The discriminators shall meet the 2-1~2-4 electrical characteristics outlined on this specification and the appearance of discriminators is to be normal.

5. Appearance

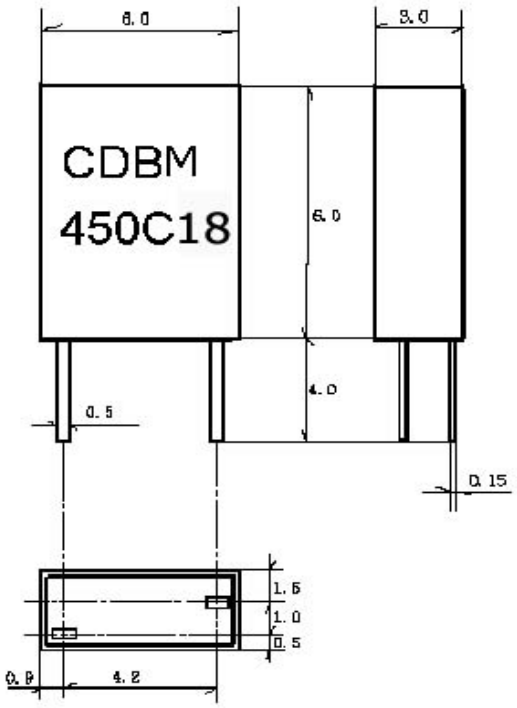
5-1) Appearance and dimension may conform to Fig.1

5-2) Identification

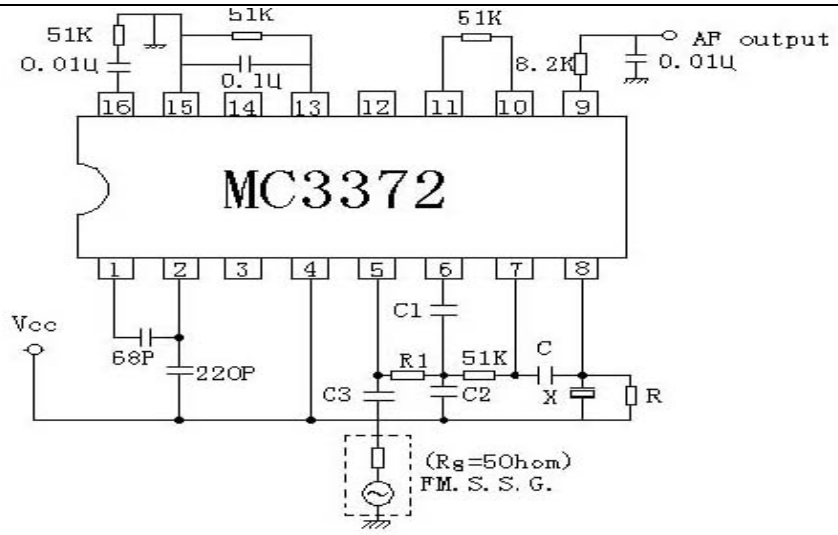
The following shall be permanently and legibly marked.

6. Dimensions (unit mm)

Fig 1.



7. Test Circuit



Test condition

Vcc=+4.0V
C=27pF
R=4.3Kohm
R1=1.8Kohm
C1=0.1μ
C2=0.1μ
C3=0.01μ
X=CDBM450C16