

CUSTOMER 客户:

规格书编号

SPEC NO:

产品规格书 SPECIFICATION

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PRODUCT 产品:	CERAMIC DISCRIMINATOR			
MODEL NO 型号:	CDBM455C3			
PREPARED 编制:	LEO CHECKED 审核: YORK			
APPROVED 批 准:	: LIUMING DATE日期: 2012-12-13			
客户确认 CUSTOMER RECEIVED:				
审核 CHECKE	D 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 DISCRIMINATOR

1. APPLICATION

This specification is applied to ceramic discriminator: CDBM455C3 used for quadrature detection with IC: SONY CXA1184.

2. SPECIFICATION No.: QJ/A5•15•0605

Anti-Resonant Frequency (Fa) : 455KHz±1.5KHz

 Δ F(Fa-Fr) : 46.0KHz±5.0KHz max.

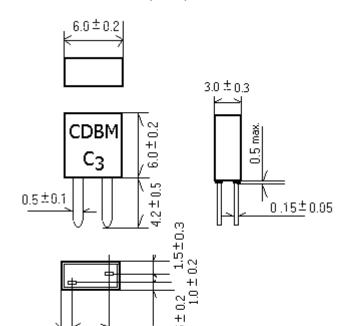
Fr: Resonant Frequency

Resonant Resistance : 70Ω max.

Capacitance(within 1 KHz) : 550PF±20%

Test instrument of impedance will be impedance analyzer type no.4192A from YHP.

3. DIMENSIONS: (mm)



Material List

Case	Polybutylen terephtalate	
Terminal	Phosphor bronze Ag Clad	
Base Sealing	Epoxy resin	

4. MAXIMUM RATINGS

4.1 Withstanding Voltage (Between each terminal)

D.C. 5OV. 1 minute

4.2 Insulation Resistance

 $100 \text{ M}\Omega$ min. at D.C. 100V

(Between each terminal)





CERAMIC DISCRIMINATOR

4.3 Input signal level 5dB (50Ω Termination)

4.4 Operating Temperature Range - 20°C to +80 °C

4.5 Storage Temperature Range 25 ±5°C

5. ELECTRICAL CHARACTERISTICS (0° C to + 40 $^{\circ}$ C)

	Item	Requirements	
5-1	Receiver Audio 3dB Bandwidth (from 455KHz)	±4.0 KHz min.	
5-2	Receiver Audio Output Voltage (at 455KHz)	40 ± 20 mV	
5-3	Distortion (at 455 KHz)	3.0% max.	
5-4	Withstanding Voltage	50V D.C. for 1 minute	

5-5 Test Method

Input signal Condition Input level : 80dB

Frequency Deviation : ±4.0KHz

Modulation Frequency: 1 KHz

Receiver Audio
 3dB Bandwidth

Input the above signal and sweep the carrier frequency around 455 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), (f1-455KHz)is defined as upper 3dB bandwidth and (455Khz-f2) defined as lower 3 dB bandwidth.

2) Receiver Audio Output Voltage

Receiver audio output voltage shall be measured when carrier frequency is adjusted to 455KHz.

3) Distortion

Carrier frequency is adjusted to 455Khz. And then ,distortion shall be measured with 1 kHz modulation frequency.

6. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

	Test Item	Condition of Test	Requirements
	Test Item	Colluition of Test	Requirements



Lead Pulling Lead Bending Care Bending Lead Bending Care	6-1	Lead Strength			
Lead Bending When force of 0.5Kg is applied to each lead in axial direction the lead shall be folded up to 90° from the axial direction and folded back to the axial direction. Filter shall be measured after being applied vibration of amplitude of 1.5mm with 600 to 3,300 r.p.m. band of vibration frequency to each of 3 perpendicular directions for 2 hour. Filter shall be measured after 3 times random dropping from the height of 30cm on concrete floor C temperature Characteristics Filter shall be measured after being placed in a chamber with 90 to 95% R. H. at 40±2°C for 100 hours and then being placed in natural condition for 2 hour. Filter shall be measured up to 1.5mm from Soldering Heat filter's body in soldering bath of 260±10°C for 5 ±0.5 seconds and then filter shall be measured after being placed in chamber with 80 °C for 100 hours and then being placed in chamber with 80 °C for 100 hours and then being placed in a chamber with 80 °C for 100 hours and then being placed in a chamber with 80 °C for 100 hours and then being placed in natural condition for 2 hour. Filter shall be measured after being placed in chamber with 80 °C for 100 hours and then being placed in natural condition for 2 hour. Filter shall be measured after being placed in a chamber with 80 °C for 100 hours and then being placed in natural condition for 2 hour. Filter shall be measured after being placed in a chamber with 80 °C for 100 hours and then being placed in natural condition for 2 hours.	0-1	_	After force 1 0Kg is applied to each lead in axial	No	mechanical
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6-9 Thermal Shock		(Low	chamber with -20°C for 100 hours and then		
6-9 Thermal Shock After temperature cycling of -20°C (30 minutes)		Temperature)	being placed in natural condition for 2 hours.		
Triter temperature cycling of -20 0 (50 minutes)	6-9	Thermal Shock	After temperature cycling of -20°C (30 minutes)		



CDBM455C3

to +80°C (30	0 minutes) was performed 5 times.
	e returned to room temperature. And e measured after being placed in
	tion for 2 hours.

Item	Requirements
Receiver Audio 3dB Bandwidth (from 455KHz)	±3.0 KHz min.
Receiver Audio Output Voltage (at 455KHz)	40±25 mV
Distortion (at 455KHz)	4.0 % max.
Withstanding Voltage	50V D. C. for 1 minute.

Table 1.