

CUSTOMER 客户:

规格书编号

SPEC NO:

产 规 书 SPECIFICATION

PRODUCT 产品:	CERAMIC DISCRIMINATOR				
MODEL NO 型号:		CD	B480C28		
PREPARED 编 制:	LEO	СНЕ	CKED 审	核 :	YORK
APPROVED 批 准:	LIUMIN	G D A	тЕ 日	期 :	2013-4-15
客户确认 CUSTOMER RECEIVED:					
审核 CHECKED			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

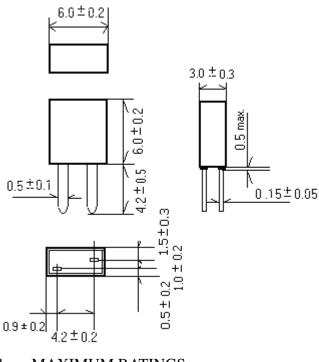
This specification is applied to ceramic discriminator: CDB480C28 used for quadrature detection with IC: TA31142F (TOSHIBA)

2. SPECIFICATION No.: QJ/A5•10•0605

MODEL NAME

Part Name	Customer's Part No.	Customer's Draving No.
CDB480C28		

3. DIMENSIONS: (mm)



Material List

	Polybutenetelephthalate
Case	(mixture of glass fiber)
Terminal	Phosphor bronze Ag Clad
Base Sealing	Epoxy resin

4. MAXIMUM RATINGS

4.3

- 4.1 Withstanding Voltage (Between each terminal)
- D.C. 5OV. 1 minute

4.2 Insulation Resistance

Input signal level

- $100 \text{ M}\Omega$ min. at D.C. 100V
- (Between each terminal)
- (Between each terminal)
- 5dB (50Ω Termination)
- 4.4 Operating Temperature Range
- 20°C to + 80 °C
- 4.5 Storage Temperature Range
- 25 ±5°C



CERAMIC DISCRIMINATOR

$(0^{\circ}\text{C to} + 40^{\circ}\text{C})$ **ELECTRICAL CHARACTERISTICS**

	Item	Requirements
5-1	Receiver Audio 3dB Bandwitdth (from 480KHz)	±4.0 KHz min.
5-2	Receiver Audio Output Voltage (at 480KHz)	40 ± 20 mV
5-3	Distortion (at 480 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

1) Recoverd Audio Input the above signal and sweep the carrier frequency

3dB Bandwidth around 480 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), (f1-480KHz)is defined as upper 3dB bandwidth

and (480Khz-f2) defined as lower 3 dB bandwidth.

Receiver Audio Receiver audio output voltage shall be measured 2) Output Voltage when carrier frequency is adjusted to 480KHz.

Distortion Carrier frequency is adjusted to 480Khz. And

then ,distortion shall be measured with 1 kHz

modulation frequency.

PRYSICAL AND ENVIRONMENTAL CHARACTERISTICS

	Test Item	Condition of Test	Requi	remen	its
6-1	Lead Strength				
	Lead Pulling	After force 1.0Kg is applied to each lead in axial	No	mech	anical
	Lead Bending	direction. filter shall be measured.	damage	and	the
		When force of 0.5Kg is applied to each lead in	measured	•	values
		_	shall meet	item	5.
		axial direction the lead shall be folded up to 90°			
		from the axial direction and folded back to the			
		axial direction.			
6-2	Vibration	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.	
6-3	Random Drop	Filter shall be measured after 3 times random dropping from the height of 30cm on concrete floor	
6-4	Temperature Characteristics	Filter shall be measured within -20 °C to	
		+80°C temperature range.	
6-5	Humidity	Filter shall be measured after being placed in a	
		chamber with 90 to 95% R. H. at 40±2°C for	The measured values
		100 hours and then being placed in natural condition for 2 hour.	shall meet Table 1.
6-6	Resistance to	Lead terminals are immersed 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 natural condition for 2 hour.	
6-7	Life Test(High	Filter shall be measured after being placed in	
		chamber with 80°C for 100 hours and then	
	Temperature)	being placed in natural condition for 2 hour.	
6-8	Life Test	Filter shall be measured after being placed in a	
	(Low	chamber with -20°C for 100 hours and then	
	Temperature)	being placed in natural condition for 2 hours.	
6-9	Thermal Shock	After temperature cycling of -20°C (30 minutes)	
		to +80°C (30 minutes) was performed 5 times.	
		Filter shall be returned to room temperature. And	
		filter shall be measured after being placed in	
		natural condition for 2 hours.	

Item	Requrements
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Receiver Audio 3dB Bandwidth (from 480KHz)	±3.0 KHz min.
Receiver Audio Output Voltage (at 480KHz)	40±20 mV
Distortion (at 480KHz)	3.0 % max.
Withstanding Voltage	50V D. C. for 1 minute.

Table 1.