

**SPECIFICATION SHEET**

<b>SPECIFICATION SHEET NO.</b>	N0529-DC455K0000S133
<b>DATE</b>	May 29, 2021
<b>REVISION</b>	A0
<b>DESCRIPTION</b>	<p>KHz SMD Discriminators 6260 Type L6.2*W6.0*H3.1mm 2 Pads CDBC Series            455.0KHz, Fr: resonant frequency 40±4.0 kHz            Operating Temp. Range -20°C ~+80°C            Reflow Profile Condition 260 °C Max.            In Tape/Reel, 2000pcs/Reel            RoHS III Complaint</p>
<b>CUSTOMER</b>	
<b>CUSTOMER PART NUMBER</b>	
<b>CROSS REF. PART NUMBER</b>	
<b>ORIGINAL PART NUMBER</b>	TGS CDBC 455C33 TLF
<b>PART CODE</b>	DC455K0000S133

**VENDOR APPROVE**

Issued/Checked/Approved



DATE: May 29, 2021

**CUSTOMER APPROVE**

DATE:

**KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES**

**MAIN FEATURE**

- KHz SMD Ceramic Discriminator 6260 Type 2 pads
- White case, L6.2\*W6.0\*H3.1mm
- Low cost and short shipment
- Reflow Profile Condition 260 °C Max.
- Cross main competitors parts CDBC and JTC series
- RoHS/RoHS III compliant
- For quadrature detection with IC: SONY/CXA1474



**APPLICATION**

- Communication Electronics

**PART CODE GUIDE**

**RFQ**

[Request For Quotation](#)

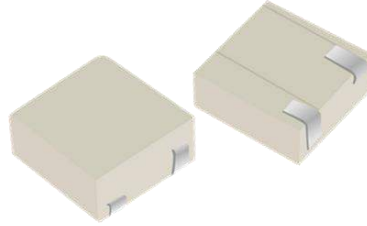
DC	455K0000	S	133
1	2	3	4

- 1) DC: Part family Code for KHz SMD Ceramic Discriminator 6260 Type L6.2\*W6.0\*H3.1mm 2 Pads
- 2) 455K0000: Frequency range code for 455.0000KHz
- 3) S: SMD type, Package Tape/Reel, 2000pcs/Reel
- 4) 133: Specification code for original part No.: **TGS CDBC 455C33 TLF**

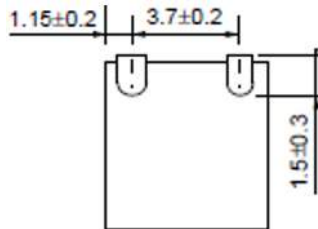
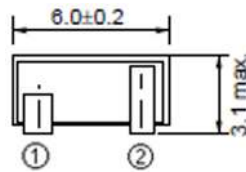
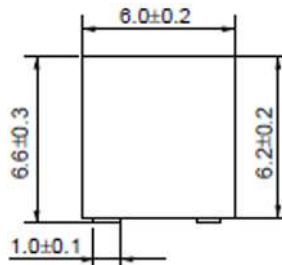
**KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES**

**DIMENSION (Unit: mm, Tol. +/-0.15mm)**

Image for reference



CDBC



**Marking**

Line 1: Series Code  
Line 2: Frequency Range  
+Internal Code

**Connection**

Pin 1: Input  
Pin 2: Output

**KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES**
**ELECTRICAL PARAMETERS**

Parameter	Part No. Symbol	Units	Value			Condition
			Min.	Typical	Max.	
Original Manufacturer	TGS	TGS Crystals				
Holder Type	CDBC	KHz SMD Discriminators 6260 Type L6.2*W6.0*H3.1mm 2 Pads				
Center Frequency Range (f0)	455	KHz	455.000			
Anti-resonate frequency (Fa)			462.00			@ ± 1.5KHz
Resonant Impedance (Ri)	C33	ohm			200	
Operation Temperature		°C	-20		+80	
Storage Temperature		°C	-40		+85	
Resonant frequency(Fr)		KHz		40± 1.5		
Capacitance (at 1 kHz)		pF		150± 20%		@ 1KHz
Temperature Stability		%	0.3			@-20 ~+80 °C
IC Model No.		SONY/CXA1474				
Withstand Voltage		DC 5.0V 1 minute				
Other		Package	T	Tape/Reel, 2000pcs/Reel		
	RoHS Status	LF	RoHS III compliant			
	Add Value		N/A			
	Special Code		For Internal Control, Blank: N/A			

 Note: Original Part Number: **TGS CDBC 455C33 TLF**

## KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES

**RELIABILITY**

Test Items	Test Method And Conditions	Requirement
<b>Humidity</b>	After being placed in a chamber with 90-95% R.H. at 40±2°C for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Table 1.
<b>High Temperature</b>	After being placed in a chamber with 80±2 °C, for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Table 1.
<b>Low Temperature</b>	After being placed in a chamber with -20±2 °C, for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Table 1.
<b>Heat Shock</b>	After being kept at room temperature, filter shall be placed at temperature of -55 °C , for 30 minutes, then be placed at temperature. 85 °C, for 30 minutes. After that returned to -55 °C again. Repeated above cycle for 5 times. After being kept in room temp. for 1 hour, filter shall be measured	It shall meet Table 1.
<b>Resistance to Solder Heat</b>	Lead terminals are immersed up to 1.5mm from filter’s body in soldering bath of 350± 10°C, for 3±0.5 sec. And then filter shall be measured after being placed in room temperature for 1 hour.	It shall meet Table 1.
<b>Solderability</b>	Lead terminals are immersed in aide solder for 5 sec and then immersed in soldering bath of 230±5°C, for 3±0.5 sec. At least 95% lead terminals shall be covered with solder	It shall meet Table 1.
<b>Drop Test</b>	Filter shall be measured after 3 times random drops from the height of 30 cm on concrete floor	No visible damage and it meet Table 1
<b>Adhesion</b>	A static load of 20N to the direction of the arrow (see Fig. 4) shall be applied on the core of the Component and hold for 10 seconds. Filter shall be soldered correctly and tightly to PCB.	It shall meet Table 1.
<b>Vibration</b>	Filter shall be measured after being applied vibration of amplitude of 1.5mm with 10-55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours	No visible damage and it meet Table 1
<b>Substrate Bending Test</b>	Apply pressure in the direction of arrow (see Fig. 3) at a rate of about 0.5mm per second until it reaches a bend of 3mm and hold for 30 seconds.	It shall meet Table 1.

**Table1**

Item	Anti-resonate frequency (Fa)	Resonant Impedance (Ri)	resonant frequency	Capacitance (at 1 kHz)
Specification	462±1.5KHz	200 ohm Max.	40±30KHz	150 pF ±20%

**KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES**

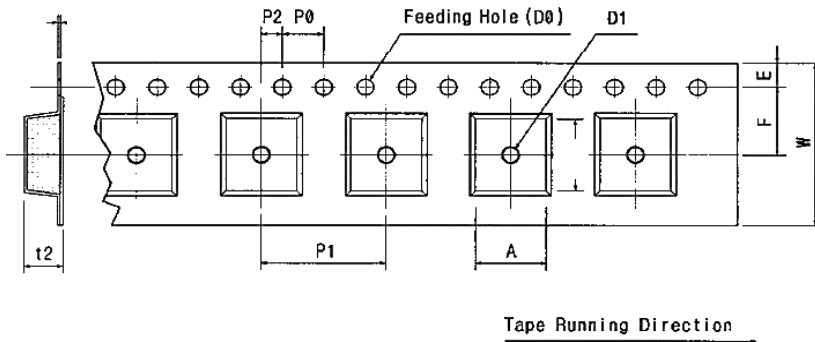
**SUGGESTED REFLOW PROFILE (For Reference Only)**



<b>Profile Feature</b>		Pb-Free Assembly
<b>Average Ramp-up Rate (Ts Max to Tp)</b>		3°C/second Max
<b>Preheat</b>	<b>Temperature Min (Ts Min.)</b>	125°C
	<b>Temperature Max (Ts Max.)</b>	200°C
	<b>Time (ts Min. to ts Max.)</b>	60 ~ 180 seconds
<b>Time maintained above</b>	<b>Temperature (T<sub>L</sub>)</b>	217°C
	<b>Time (t<sub>L</sub>)</b>	60 ~ 150 seconds
<b>Peak/Classification Temperature (T<sub>p</sub>)</b>		260 °C
<b>Time within 5°C of actual Peak Temperature (t<sub>p</sub>)</b>		20 ~ 40 seconds
<b>Ramp-down rate</b>		6 °C /Second Max.
<b>Time 25 °C to Peak Temperature</b>		8 minutes Max.
<b>Suggest reflow times</b>		3 Times Max.

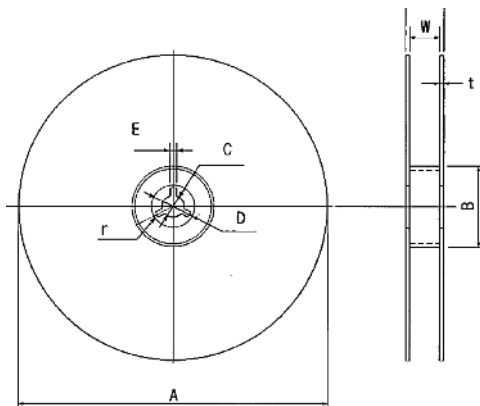
**KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES**

**REEL DIMENSION (Unit: mm, 2000pcs/Reel)**

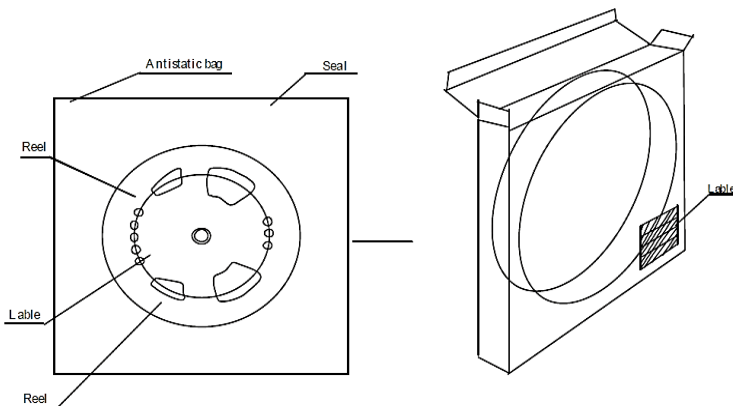


Code	Dimension
W	16.0+/-0.30
F	6.80+/-0.20
E	1.75+/-0.10
P 0	4.00+/-0.10
P 1	7.80+/-0.10
P 2	2.00+/-0.05
D 0	Ø1.5+/-0.10
D 1	Ø1.5+/-0.10
t 2	3.60+/-0.10
A	7.70+/-0.10

**TAPE DIMENSION (Unit: mm)**



Code	Dimension
A	Ø330+/-1.0
B	Ø80.0+/-0.5
C	Ø13.0+/-0.5
E	2.00+/-0.3
W	16.0+/-1.0



**DISCLAIMER**

NextGen Components, Inc. reserves the right to make changes to the product(s) and or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information