




SPECIFICATION SHEET

SPECIFICATION SHEET NO.	N0529-DC455K0000S103
DATE	May 29, 2021
REVISION	A0
DESCRIPTION	<p>KHz SMD Discriminators 6260 Type L6.2*W6.0*H3.1mm 2 Pads CDBC Series 455.0KHz, Fr: resonant frequency 46±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>
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	TGS CDBC 455C03 TLF
PART CODE	DC455K0000S103

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/CXA1184M



APPLICATION

- Communication Electronics

RFQ

[Request For Quotation](#)

PART CODE GUIDE

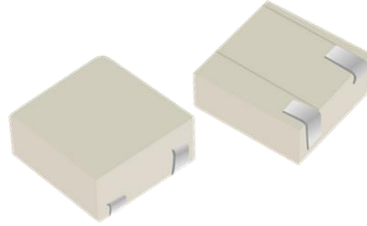
DC	455K0000	S	103
1	2	3	4

- 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) 103: Specification code for original part No.: **TGS CDBC 455C03 TLF**

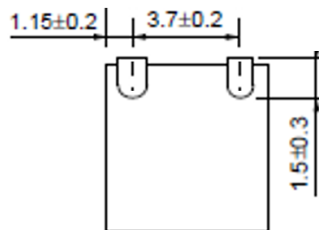
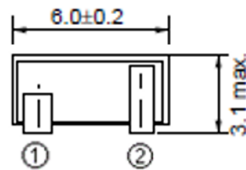
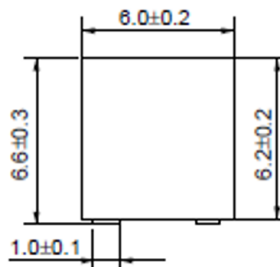
KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES

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			@ ± 1.0KHz
Resonant Impedance (Ri)	C03	ohm			70	
Operation Temperance		°C	-20		+80	
Storage Temperance		°C	-40		+85	
Resonant frequency(Fr)		KHz		46± 5.0		
Capacitance (at 1 kHz)		pF		550± 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 455C03 TLF**

KHZ SMD CERAMIC DISCRIMINATOR CDBC SERIES

RELIABILITY

Test Items	Test Method And Conditions	Requirement
Humidity	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.
High Temperature	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.
Low Temperature	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.
Heat Shock	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.
Resistance to Solder Heat	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.
Solderability	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.
Drop Test	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
Adhesion	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.
Vibration	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
Substrate Bending Test	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	Center Frequency	Resonant Impedance	Resonant frequency	Capacitance (at 1 kHz)
Specification	455±1.0KHz	70 ohm Max.	46±5.0 KHz	550 pF±20%.

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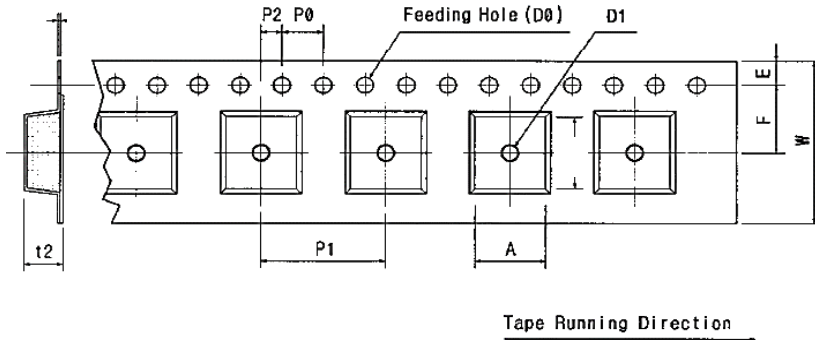
SUGGESTED REFLOW PROFILE (For Reference Only)



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

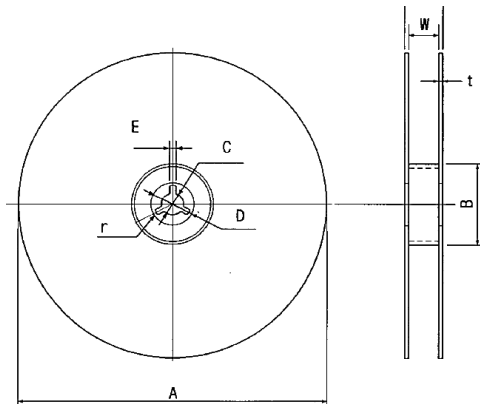
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REEL DIMENSION (Unit: mm, 2000pcs/Reel)

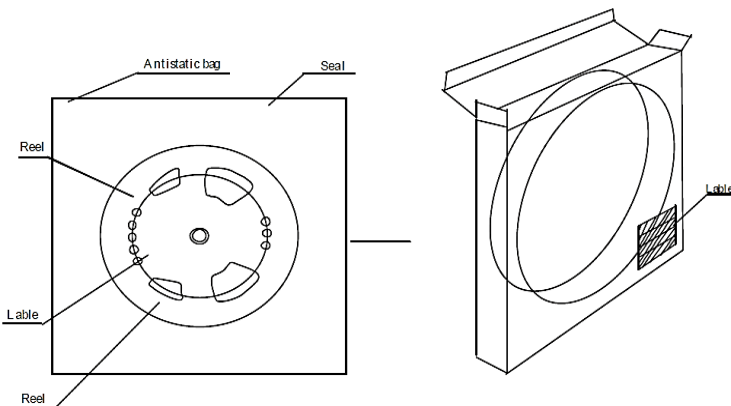


Code	Dimension
W	16.0+/-0.30
F	6.80+/-0.20
E	1.75+/-0.10
P 0	4.00+/-0.10
P 1	7.80+/-0.10
P 2	2.00+/-0.05
D 0	Ø1.5+/-0.10
D 1	Ø1.5+/-0.10
t 2	3.60+/-0.10
A	7.70+/-0.10

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



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