NextGen Components,Inc.

PART CODE: **FB455K0000L003**

SPECIFICATION SHEET

SPECIFICATION SHEET NO.	Q1201-FB455K0000L003	
DATE	Dec. 01, 2023	
REVISION	A0	Updated With Most Recent Data - Official First Release
DESCRIPTION AND MAIN PARAMETRICS	KHz Dip Ceramic Filter L11.0*W7.0*H8.0mm 5 Pins CF W Series 455.0KHz, 6dB Bandwidth: ±10.0KHz Min.; 50dB Selectivity:±20.0KHz Max. Stop Band Attenuation: 45dB Min.@F0±100KHz; Ripple: 2.0dB Max. Insertion Loss: 5.0dB Max. Input/Output Impedance:1.5 Kohm Operating Temp. Range -20°C ~+85°C, Packed in Bulk RoHS/RoHS III compliant, RoHS Annex III lead Exemption (exempt per RoHS EU 2015/863)	
CUSTOMER		
CUSTOMER PART NO.		
CROSS REF. PART NO.		
ORIGINAL MFG/PART NO.	TGS/CF 455DW BLH/LT455DW	
PART CODE	FB455K0000L003	

VENDOR APPROVE
Issued/Checked/Approved   
DATE: Dec. 01, 2023

CUSTOMER APPROVE
DATE:

NextGen Components,Inc.

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KHZ DIP CERAMIC FILTER STANDARD TYPE CF W SERIES

MAIN FEATURE

- KHz Dip Ceramic Filter CF W Series
- Case Dimension L11.0*W7.0*H8.0mm, 5 Pins
- Low Cost And Short Shipment
- Cross More Competitors Part CFWL Series
- RoHS/RoHS III compliant, RoHS Annex III lead Exemption (exempt per RoHS EU 2015/863)

APPLICATION

- Communication Electronics

PART CODE GUIDE

RFQ
Request For Quotation

FB	455K0000	L	003
1	2	3	4

1. FB: Part family Code for KHz Dip Ceramic Filter L11.0*W7.0*H8.0mm 5 Pins CF W Series
2. 455K0000: Frequency range code for 455.0000KHz
3. L: Dip type, Package in bulk
4. 003: Internal Control Code or Special Parameters Code Letter A~Z or digits (1-9)

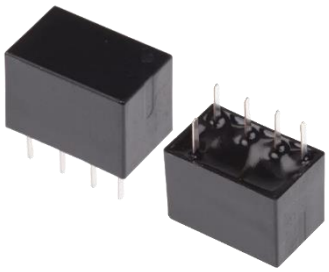
HOW TO ORDER

Please follow up **Part Code Guide** and indicate pat code when you order or RFQ.

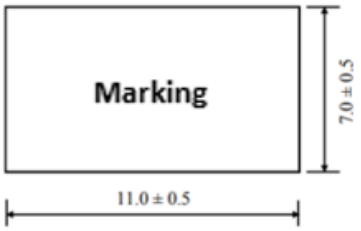
KHZ DIP CERAMIC FILTER STANDARD TYPE CF W

DIMENSION (Unit: mm)

Image for reference



Top View

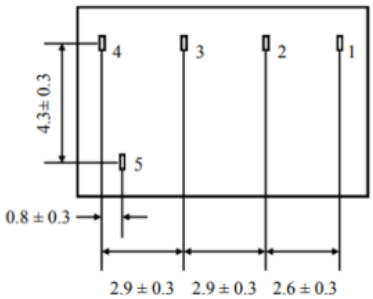


Marking

Line 1: Series Code

Line 2: Frequency Range + Internal Code

Bottom View



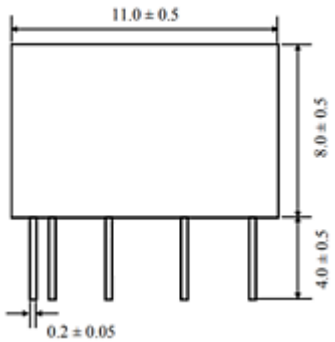
Connection

Pin 1: Input

Pin 2, Pin 3, Pin 4: Ground

Pin 5: Output

Side View

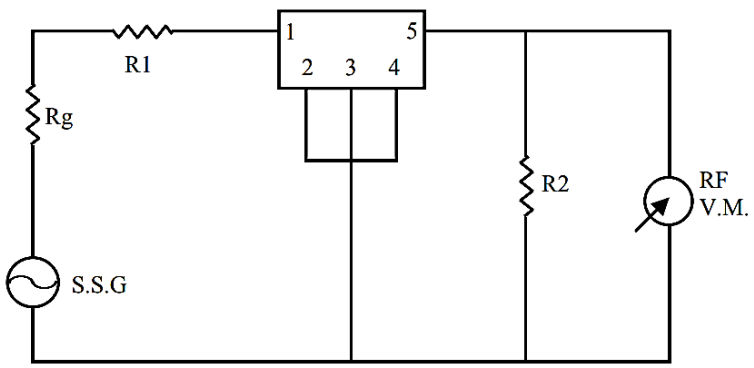


KHZ DIP CERAMIC FILTER STANDARD TYPE CF W

GENERAL ELECTRICAL PARAMETERS

PARAMETER	UNITS	VALUE			CONDITION
		MIN.	TYPICAL	MAX.	
Operation Temperance	°C	-20		+85	
Storage Temperance	°C	-40		+85	
Temperature Stability	%			±0.3	@ -20°C ~+85°C
Insulation Resistance	MΩ	100			@DC 100V 1 minute
RoHS Status	RoHS/RoHS III compliant, RoHS Annex III lead Exemption (exempt per RoHS EU 2015/863)				

MEASURING CIRCUIT



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KHZ DIP CERAMIC FILTER STANDARD TYPE CF W

MAIN ELECTRICAL PARAMETERS - Ta = 25℃

Part Code	Frequency Range (KHz)	Bandwidth (6dB) Min.(KHz)	Selectivity (50dB) Max. (KHz)	Stop Band Attenuation Min. (dB)	Ripple Max. (dB)	Insertion Loss Max.(dB)	Input/ Output Impedance (KΩ)
FB455K0000L001	455±1.0	±15.0	±30.0	30	2.0	5.0	1.5
FB455K0000L002	455±1.0	±12.5	±24.0	45	2.0	5.0	1.5
FB455K0000L003	455±1.0	±10.0	±20.0	45	2.0	5.0	1.5
FB455K0000L004	455±1.0	±7.5	±15.0	45	2.0	5.0	1.5
FB455K0000L005	455±1.0	±6.0	±12.5	45	2.0	5.0	2.0
FB455K0000L006	455±1.0	±4.5	±10.0	45	2.0	5.0	2.0
FB455K0000L007	455±1.0	±3.0	±9.0	45	2.0	5.0	2.0
FB455K0000L008	455±1.0	±3.0	±9.0	50	2.0	5.0	2.0
FB455K0000L009	455±1.0	±2.0	±7.5	50	2.0	7.0	2.0
FB455K0000L010*	455±1.0	±1.5	±4.5	60	3.0	8.0	2.0
FB450K0000L001	450±1.0	±15.0	±30.0	30	2.0	5.0	1.5
FB450K0000L002	450±1.0	±12.5	±24.0	45	2.0	5.0	1.5
FB450K0000L003	450±1.0	±10.0	±20.0	45	2.0	5.0	1.5
FB450K0000L004	450±1.0	±7.5	±15.0	45	2.0	5.0	1.5
FB450K0000L005	450±1.0	±6.0	±12.5	45	2.0	5.0	2.0
FB450K0000L006	450±1.0	±4.5	±10.0	45	2.0	5.0	2.0
FB450K0000L007	450±1.0	±3.0	±9.0	45	2.0	5.0	2.0
FB450K0000L008	450±1.0	±3.0	±9.0	50	2.0	5.0	2.0
FB450K0000L009	450±1.0	±2.0	±7.5	50	2.0	7.0	2.0
FB450K0000L010*	450±1.0	±1.5	±4.5	60	3.0	8.0	2.0

Note: *: Spurious @(0.1-1.0MHz): 50dB Min.

MEASUREMENT

- Measurement Condition: Measurement shall be carried out at the standard temperature of 25±2℃. If no specific requirements, Test can be carried out under 5-35℃.

PHYSICAL CHARACTERISTICS

Test Items	Measurement Condition	Requirement
Random Drop	Filter shall be measured after 3 times random drops from the height of 30cm on concrete floor	No visible damage and it 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 damage and it meet Table 1.
Solderability	Lead terminals are immersed in aide solder for 5 sec and then immersed in soldering bath of 230±5℃, for 3±0.5 sec.	At least 95% lead terminals shall be covered with solder.
Terminal strength Pulling	After force of 1kg for 10 seconds is applied to each terminal in axial direction, Filter shall be measured.	No damage, no cut-off and it meet Table 1.
Bending	After lead terminals shall be fixed at 2mm from filter's body, they shall be folded up to 90°from their axial directions and folded back to –90°.Then folded back to their axial direction, the speed of folding be each 3 seconds.	No damage, no cut-off and it meet Table 1

ENVIRONMENTAL CHARACTERISTICS

Test Items	Measurement condition	Requirement
Humidity	After being placed in a chamber with 90-95% R.H. at 40±2℃ for 100 hours and then being placed in room temperature for 1 hour, filter shall be measured.	It shall meet Table 1.
Resistance to Solder Heat	After being placed in a chamber with 80±2℃,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℃,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℃,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 ℃ , for 30 minutes, then be placed at temperature. 85℃, for 30 minutes. After that returned to –55℃ 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.

Table1

Item	Center Frequency	Band width (6dB)	Selectivity (50dB)	Stop Band Attenuation (fo±100KHz)	Ripple	Insertion Loss
Specification	455±1.0KHz Max.	±10.0KHz Min.	±20.0 KHz Max.	45dB Min.	2.0dB Max.	5.0dB Max.

IMPORTANT NOTES AND DISCLAIMER

1. All Product parametric performance is indicated in the Electrical Characteristics for the listed herein test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.
2. NextGen Component, Inc (*NextGen*) reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
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