

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                   |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| SPECIFICATION SHEET NO.             | S0928- LTM455BW00L001                                                                                                                                                                                                                                                                                                                                                                                      |                                                   |
| ORIGINAL MFG/PART NO                | TGS Crystals/CFM455BW/LTM455BW                                                                                                                                                                                                                                                                                                                                                                             |                                                   |
| NEXTGEN PART CODE                   | LTM455BW00L001                                                                                                                                                                                                                                                                                                                                                                                             | Indicate This Code For <a href="#">RFQ</a> /Order |
| DATE                                | Sept. 28, 2025                                                                                                                                                                                                                                                                                                                                                                                             |                                                   |
| REVISION                            | A1                                                                                                                                                                                                                                                                                                                                                                                                         | Updated With Most Recent Data                     |
| DESCRIPTION AND<br>MAIN PARAMETRICS | <p>KHz DIP Ceramic Filter, Standard Type, 5 Pins, LTM W Series</p> <p>Case 9565, Dimension L9.5*W6.5*H6.3mm</p> <p>455KHz, Insertion Loss. 4.0dB Max.; 6dB Bandwidth: <math>\pm 15.0</math>KHz Min.</p> <p>Input/Output Impedance: 1500 ohm,</p> <p>Operating Temp. Range -20°C ~+80°C, Packed in Bulk</p> <p>RoHS/RoHS III compliant, RoHS Annex III lead Exemption<br/>(exempt per RoHS EU 2015/863)</p> |                                                   |
| CUSTOMER                            |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                   |
| CUSTOMER PART NUMBER                |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                   |
| CROSS REF. PART NUMBER              |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                   |
| MEMO                                |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                   |

### VENDOR APPROVE

Issued/Checked/Approved



Date: Sept. 28, 2025

### CUSTOMER APPROVE

Date:

## MAIN FEATURE

- KHz DIP Ceramic Filter, Standard Type, 5 pins, Case 9565
- Ultra Small Black Case, Dimension L9.5\*W6.5\*H6.3mm
- Low Cost And Short Shipment
- High Selectivity
- 450KHz is available
- Cross Main Competitors Parts CFULB series
- REACH/RoHS/RoHS III compliant, RoHS Annex III lead Exemption  
(Exempt per RoHS EU 2015/863)



*Image shown is a representation only.*

*Exact specifications should be obtained  
from the product dimension.*

## APPLICATION

- Communication Electronics



## ELECTRICAL CHARACTERISTICS

- See Page 5 ~Page 9 For Different Part Code
- All Parametric are Subject To NextGen Components' Final Confirmation

## HOW TO ORDER

- Please follow up part code guide and indicate Part Code LTM455BW00L001 when you order or RFQ.

## PART CODE GUIDE

**RFQ**

[Request For Quotation](#)

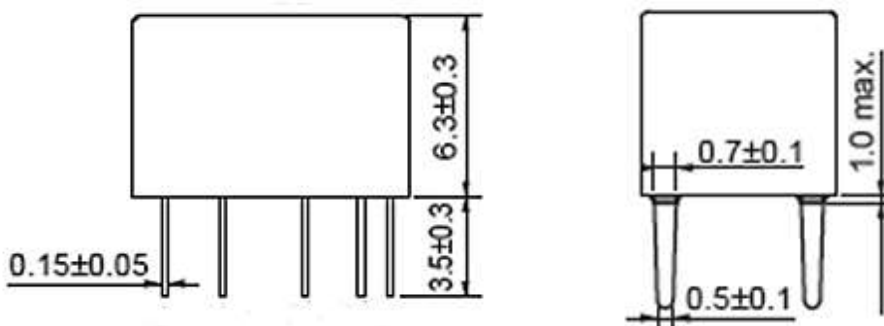
| CODE   | NAME             | KEY SPECIFICATION OPTION                                                                               |
|--------|------------------|--------------------------------------------------------------------------------------------------------|
| LTM    | Product Index    | KHz DIP Standard Ceramic Filter, Extra Small Case 9565, Dimension L9.5*W6.5*H6.3mm                     |
| 455    | Frequency Range  | 450: 450KHz; 455: 455KHz                                                                               |
| B      | Parametric Code  | Letter or Digits (A~Z, a~z or 0~9)                                                                     |
| W      | Pin Code         | U: 4 pins; W: 5 pins                                                                                   |
| 00L001 | Internal Control | Letter or Digits (A~Z, a~z or 0~9)                                                                     |
| - XX   | Suffix           | Blank: N/A<br>XX: Internal Control Code, Letter A~Z, a~z or digits (0~9) for Special/Custom Parameters |

DIMENSION (Unit: mm) – Case 9565, 4 Pins, L9.5\*W6.5\*H6.3mm

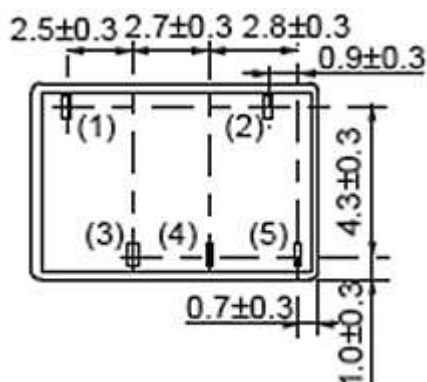
Top View



Side View



Bottom View

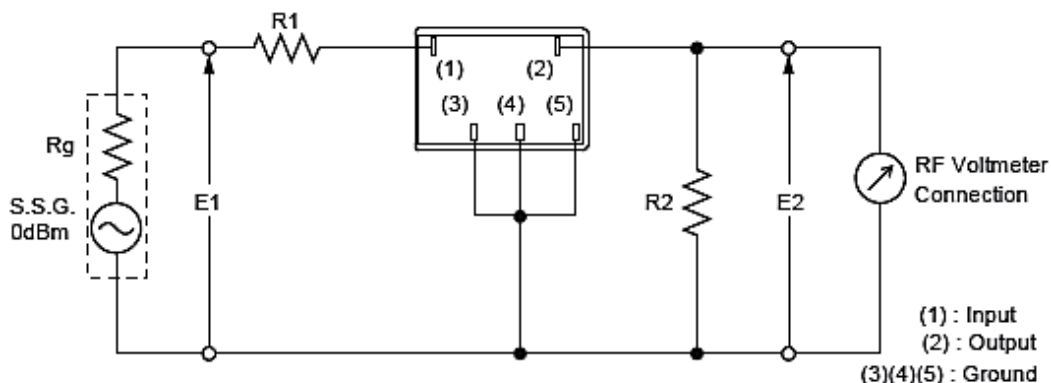


Connection

- ① Input
- ② Output
- ③ ④ ⑤ Ground

## MEASUREMENT

- Measurement shall be carried out at the standard temperature of  $25\pm 2^{\circ}\text{C}$ . If no specific requirements, Test can be carried out under  $5-35^{\circ}\text{C}$ .
- Measuring Circuit



$$R_g + R_1 = R_2 = \text{Input/Output Impedance}$$

## GENERAL ELECTRICAL PARAMETERS

| PARAMETER             | UNITS              | VALUE |         |           | CONDITION                                        |
|-----------------------|--------------------|-------|---------|-----------|--------------------------------------------------|
|                       |                    | MIN.  | TYPICAL | MAX.      |                                                  |
| Operating Temperature | $^{\circ}\text{C}$ | -20   |         | +80       |                                                  |
| Storage Temperature   | $^{\circ}\text{C}$ | -40   |         | +85       |                                                  |
| Temperature Stability | %                  |       |         | $\pm 0.5$ | @ $-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$ |
| Insulation Resistance | $\text{M}\Omega$   | 100   |         |           | @ DC 25V 1 minute                                |

## 455KHZ MAIN ELECTRICAL PARAMETRICS PART I - Ta = 25°C

| Part Code                      | Center Frequency<br>(f0) | Bandwidth<br>(3dB)<br>Min. | Bandwidth<br>(6dB)<br>Min. | Bandwidth<br>(50dB)<br>Max | Stop<br>Band Attenuation<br>Min. |
|--------------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------------|
|                                | @ 6dB Bandwidth          |                            |                            |                            | @ f0 ±100KHz                     |
|                                | KHz                      | KHz                        | KHz                        | KHz                        | dB                               |
| <a href="#">LTM455BW00L001</a> | 455 ±2.0                 | ±12.5                      | ±15.0                      | ±30.0                      | 35                               |
| LTM455CW00L002                 | 455 ±2.0                 | ±10.0                      | ±12.5                      | ±24.0                      | 35                               |
| LTM455DW00L003                 | 455 ±2.0                 | ±7.5                       | ±10.0                      | ±20.0                      | 35                               |
| LTM455EW00L004                 | 455 ±1.0                 | ±5.5                       | ±7.5                       | ±15.0                      | 45                               |
| LTM455FW00L005                 | 455 ±1.0                 | ±4.5                       | ±6.0                       | ±12.5                      | 45                               |
| LTM455GW00L006                 | 455 ±1.0                 | ±3.0                       | ±4.5                       | ±10.0                      | 45                               |
| LTM455HW00L007                 | 455 ±1.0                 | -                          | ±3.0                       | ±9.0                       | 45                               |
| LTM455HTW0L017                 | 455 ±1.0                 | -                          | ±3.0                       | ±9.0                       | 55                               |

## 455KHZ MAIN ELECTRICAL PARAMETRICS PART II - Ta = 25°C

| Part Code                      | Center Frequency<br>(f0) | Ripple<br>Max.  | Insertion<br>Loss Max. | Input/Output<br>Impedance |
|--------------------------------|--------------------------|-----------------|------------------------|---------------------------|
|                                | @ 6dB Bandwidth          |                 | @ loss Point           |                           |
|                                | KHz                      | dB              | dB                     | Ω                         |
| <a href="#">LTM455BW00L001</a> | 455 ±2.0                 | 2 @ f0 ±12.5KHz | 4                      | 1500                      |
| LTM455CW00L002                 | 455 ±2.0                 | 2 @ f0 ±10.0KHz | 4                      | 1500                      |
| LTM455DW00L003                 | 455 ±2.0                 | 2 @ f0 ±10.0KHz | 4                      | 1500                      |
| LTM455EW00L004                 | 455 ±1.0                 | 2 @ f0 ±5.5KHz  | 5                      | 1500                      |
| LTM455FW00L005                 | 455 ±1.0                 | 2 @ f0 ±4.5KHz  | 5                      | 1500                      |
| LTM455GW00L006                 | 455 ±1.0                 | 2 @ f0 ±3.0KHz  | 5                      | 1500                      |
| LTM455HW00L007                 | 455 ±1.0                 | 2 @ f0 ±2.0KHz  | 5                      | 2000                      |
| LTM455HTW0L017                 | 455 ±1.0                 | 2 @ f0 ±2.0KHz  | 5                      | 2000                      |

## 450KHZ MAIN ELECTRICAL PARAMETRICS PART I - Ta = 25°C

| Part Code      | Center Frequency<br>(f0) | Bandwidth<br>(3dB)<br>Min. | Bandwidth<br>(6dB)<br>Min. | Bandwidth<br>(50dB)<br>Max | Stop<br>Band Attenuation<br>Min. |
|----------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------------|
|                | @ 6dB Bandwidth          |                            |                            |                            | @ f0 ±100KHz                     |
|                | KHz                      | KHz                        | KHz                        | KHz                        | dB                               |
| LTM450BW00L001 | 450 ±2.0                 | ±12.0                      | ±15.0                      | ±30.0                      | 35                               |
| LTM450CW00L002 | 450 ±1.0                 | -                          | ±12.5                      | ±24.0                      | 45                               |
| LTM450DW00L003 | 450 ±1.0                 | ±7.5                       | ±10.0                      | ±20.0                      | 35                               |
| LTM450EW00L004 | 450 ±1.0                 | ±5.0                       | ±7.5                       | ±15.0                      | 45                               |
| LTM450FW00L005 | 450 ±1.0                 | ±4.5                       | ±6.0                       | ±12.5                      | 45                               |
| LTM450GW00L006 | 450 ±1.0                 | ±3.0                       | ±4.5                       | ±10.0                      | 45                               |
| LTM450HW00L007 | 450 ±1.0                 | ±2.0                       | ±3.0                       | ±9.0                       | 45                               |
| LTM450HTW0L017 | 450 ±1.0                 | ±2.0                       | ±3.0                       | ±9.0                       | 55                               |



## 450KHZ MAIN ELECTRICAL PARAMETRICS PART II - Ta = 25°C

| Part Code      | Center Frequency<br>(f0) | Ripple<br>Max.  | Insertion<br>Loss Max. | Input/Output<br>Impedance |
|----------------|--------------------------|-----------------|------------------------|---------------------------|
|                | @ 6dB Bandwidth          |                 | @ loss Point           |                           |
|                | KHz                      | dB              | dB                     | Ω                         |
| LTM450BW00L001 | 450 ±2.0                 | 2 @ f0 ±12.0KHz | 4                      | 1500                      |
| LTM450CW00L002 | 450 ±1.0                 | 2 @ f0 ±8.0KHz  | 4                      | 1500                      |
| LTM450DW00L003 | 450 ±1.0                 | 2 @ f0 ±7.5KHz  | 4                      | 1500                      |
| LTM450EW00L004 | 450 ±1.0                 | 2 @ f0 ±4.5KHz  | 5                      | 1500                      |
| LTM450FW00L005 | 450 ±1.0                 | 2 @ f0 ±4.5KHz  | 5                      | 2000                      |
| LTM450GW00L006 | 450 ±1.0                 | 2 @ f0 ±3.0KHz  | 5                      | 2000                      |
| LTM450HW00L007 | 450 ±1.0                 | 2 @ f0 ±2.0KHz  | 5                      | 2000                      |
| LTM450HTW0L017 | 450 ±1.0                 | 2 @ f0 ±2.0KHz  | 5                      | 2000                      |

## 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 at Page 5~9           |
| 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 at Page 5~9                   |
| Solderability          | Lead terminals are immersed in aide solder for 5 sec and then immersed in soldering bath of $230\pm 5^{\circ}\text{C}$ , for $3\pm 0.5$ sec.                                                                | At least 95% lead terminals shall be covered with solder. |
| Substrate Bending Test | Apply pressure in the direction of arrow at a rate of about 0.5mm per second until it reaches a bend of 3mm and hold for 30s.                                                                               | No damage, no cut-off and it meet Table at Page 5~9       |
| Adhesion               | A static load of 20N to the direction of the arrow shall be applied on the core of the component and hold for 10 seconds. Filter shall be soldered correctly and tightly to PCB.                            | No damage, no cut-off and it meet Table at Page 5~9       |
| Reflow Soldering       | Put on the solder paste on the printed wiring board the samples shall be mounted and soldered under the condition, then it shall be subjected to the room atmosphere for 24 hours prior to the measurement. | No damage, no cut-off and it meet Table at Page 5~9       |

## ENVIRONMENTAL CHARACTERISTICS

| TEST ITEMS                | MEASUREMENT CONDITION                                                                                                                                                                                                                                                                                 | 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 at Page 5~9 |
| Resistance to Solder Heat | 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 at Page 5~9 |
| 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 at Page 5~9 |
| 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 at Page 5~9 |
| 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 at Page 5~9 |

## IMPORTANT NOTES AND DISCLAIMER

1. **ROHS COMPLIANCE:** The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU RoHS Directive (EU) 2015/863 EC (RoHS3). RoHS Test Report for this product can be obtained at Download Center.
2. **REACH COMPLIANCE:** REACH substances of high concern (SVHCs) information is available for this product. Since the European Chemical Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future, REACH Test Report for this product can be obtained at Download Center.
3. 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.
4. 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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8. *NextGen* requires that customers first obtain an RMA (Returned Merchandise Authorization) number prior to returning any products. Returns must be made within 30 days of the date of invoice, be in the original packaging, unused and like-new condition. At the time of quoting or purchasing, a product may say that it is Non-Cancelable/ Non-Returnable (NCNR). These products are not returnable and not refundable.