(LTM 455/450 U/W)
Communication Ceramic Filters

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Product Introduction

<table>
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<th>Introduction (LTM 455/450 U/W)</th>
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<tbody>
<tr>
<td>Features:</td>
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</tbody>
</table>
| ● LTM 455 EU Dimensions: (6.5 × 6.5 × 6.2 mm).
| ● LTM 455 EW Dimensions: (6.5 × 9.5 × 6.2 mm).
| ● Center Frequency: 455 kHz (450 kHz is also available).
| ● Input / Output Impedance: 1000Ω ~ 2000Ω.
| ● Insertion Loss (dB) max: 4db, 6db.
| ● Pass Band Ripple (dB) max: 2db. |

Token communication ceramic filter is Murata CFUM/WM 455/450 compatible. Token ceramic filters for communication LTM 455/450 U/W series are miniaturized versions of the Murata CFU/CFWS lines.

These compact, highly selective characteristics are recommended for use in applications ranging from two-way radio to auxiliary filters in high class transceivers.

These ultra-miniature versions consume approximately 40% less volume while still offering the same high performance filter characteristics.

Contact us with your specific needs. For more information, please link to Token official website “Ceramic Filters”.
Dimensions

Dimensions (Unit: mm) (LTM 455/450 U/W)

(LTM 455 EU) Dimensions

(LTM 455 EW) Dimensions
# Technical Characteristics

## Technical Characteristics (LTM 455/450 U/W)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Center Frequency (kHz)</th>
<th>Insertion Loss (dB) max</th>
<th>Pass Band Ripple (dB) max</th>
<th>6dB Band Width (kHz) max</th>
<th>40dB Band Width (kHz) max</th>
<th>50dB Band Width (kHz) max</th>
<th>Spurious Attenuation fo±100kHz (dB) min</th>
<th>Input / Output Impedance (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTM455AU</td>
<td>LTM455AW</td>
<td>455±2.0</td>
<td>4</td>
<td>2</td>
<td>±17.5</td>
<td>±40</td>
<td>±35</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455BU</td>
<td>LTM455BW</td>
<td>455±2.0</td>
<td>4</td>
<td>2</td>
<td>±15</td>
<td>±40</td>
<td>±30</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455CU</td>
<td>LTM455CW</td>
<td>455±2.0</td>
<td>4</td>
<td>2</td>
<td>±12.5</td>
<td>±24</td>
<td>±24</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455DU</td>
<td>LTM455DW</td>
<td>455±1.5</td>
<td>4</td>
<td>2</td>
<td>±10</td>
<td>±20</td>
<td>±20</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455EU</td>
<td>LTM455EW</td>
<td>455±1.5</td>
<td>6</td>
<td>2</td>
<td>±7.5</td>
<td>±15</td>
<td>±15</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455FU</td>
<td>LTM455FW</td>
<td>455±1.5</td>
<td>6</td>
<td>2</td>
<td>±6</td>
<td>±12.5</td>
<td>±12.5</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455GU</td>
<td>LTM455GW</td>
<td>455±1.5</td>
<td>6</td>
<td>2</td>
<td>±4.5</td>
<td>±10</td>
<td>±10</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455HU</td>
<td>LTM455HW</td>
<td>455±1.0</td>
<td>6</td>
<td>2</td>
<td>±3</td>
<td>±9</td>
<td>±9</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455IU</td>
<td>LTM455IW</td>
<td>455±1.0</td>
<td>6</td>
<td>2</td>
<td>±2</td>
<td>±7.5</td>
<td>±7.5</td>
<td>28 / 40</td>
</tr>
<tr>
<td>LTM455HTU</td>
<td>LTM455HTW</td>
<td>455±1.0</td>
<td>6</td>
<td>2</td>
<td>±3</td>
<td>±9</td>
<td>±9</td>
<td>35 / 60</td>
</tr>
</tbody>
</table>

**Notes:**
- Center frequency 450kHz is also available.

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(LTM 455 U) Characteristics

(LTM 455 W) Characteristics
Test Circuit

(LTM455U) Test Circuit

Rg+R1=R2=Input/Output Impedance

(LTM455W) Test Circuit

Rg+R1=R2=Input/Output Impedance

Order Codes

Order Codes (LTM 455/450 U/W)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Package</th>
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<tbody>
<tr>
<td>LTM455BU</td>
<td>P</td>
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</table>
General Information

Introduction of Filters
For more than two decades, piezo technology has been instrumental in the proliferation of solid state electronics. A view of the future reveals that even greater expectations will be placed on piezoelectric material in the area of new applications and for more stringent performance criteria in modern products.

Token sophisticated ceramics technology has greatly increased selectivity and wide-band characteristics, and has stabilized the characteristics of ceramic filters. The series covers a wide range of attenuation and bandwidths to allow selection of the most optimum filter characteristics for each application.

Token filters are band pass filters consisting of one or more ceramic resonators connected in a ladder network configuration. Pass band characteristics are determined by the relative resonant and anti-resonant frequencies of the resonators. Both narrow and wide pass band configurations are manufactured by adjusting the resonator frequency characteristics.

The IC (Integrated Circuit) has found wide use in the field of commercial equipment, such as automotive radios, stereo systems, 2-way communications, TV sets, etc. Thus, new miniature integrated filters, with high performance, are extremely desirable for use in IF circuits.

Furthermore, radio wave disturbance due to rapid progress of data transmitting rate and remarkable sophistication of communication network have become significant traffic conflicts. Accordingly, the demand for filters with high selectivity and wide pass band width has boosted.

The IC application of the active elements will continue its progress, and there will be a growing demand for highly selective, non-adjustable, miniature and wide pass band width IF circuit.

Advantage of Token Piezoelectric Filters
Token Electronics had been able to develop specialized piezo materials which when combined with an advance design have resulted in a complete line of practical, inexpensive piezo devices for entertainment and communications applications.

Token reliably deliver high-quality components according to the each customer special needs with respect to performance, costs, and technology modifications.

For marketing discontinuations or sourcing activities concerning Piezoelectric Filter products, you are encouraged to contact our Sales Department so the request can be properly directed within Token.