Version: December 1, 2022



# (LT 455/450 U/W) Communication Ceramic Filters

Web: www.token.com.tw

Email: rfq@token.com.tw

Token Electronics Industry Co., Ltd.

Taiwan: No.137, Sec. 1, Zhongxing Rd., Wugu District,

New Taipei City, Taiwan. 248012

Tel: +886 2981 0109 Fax: +886 2988 7487

China: 17P, Nanyuan Maple Leaf Bldg., Nanshan Ave.,

Nanshan Dist., Shenzhen, Guangdong, China. 518054

Tel: +86 755 26055363



# Product Introduction

### Introduction (LT 455/450 U/W)

### **Features:**

LT455 EU Dimensions: (7.0 × 8.0 × 8.0 mm).
 LT455 EW Dimensions: (7.0 × 11.0 × 8.0 mm).

• Center frequency: 450KHz, 455KHz.

• Pass Band Ripple (dB) Max.: 2 db.

• Insertion Loss (dB) Max.: 4 db, 6 db.

• Input / Output Impedance:  $1000\Omega \sim 2000\Omega$ .

Token Ceramic Filters Address the G.D.T. Characteristics for Communication (Murata CF, SF Compatible). Token ceramic filters for communication LT 455/450 U/W series are 4-element and 6-element devices connected in ladder form. These highly selective filters are designed to address the G.D.T. characteristics required in digital communications.

The excellent G.D.T. characteristics allow these filters to be utilized in areas such as the mobile cellular markets as well as a variety of stereo applications. (Also available in 450 KHz version.)



Custom parts are available on request. Token will also produce devices outside these specifications to meet specific customer requirements, please contact our sales or link to Token official website "Ceramic Filters" for more information.

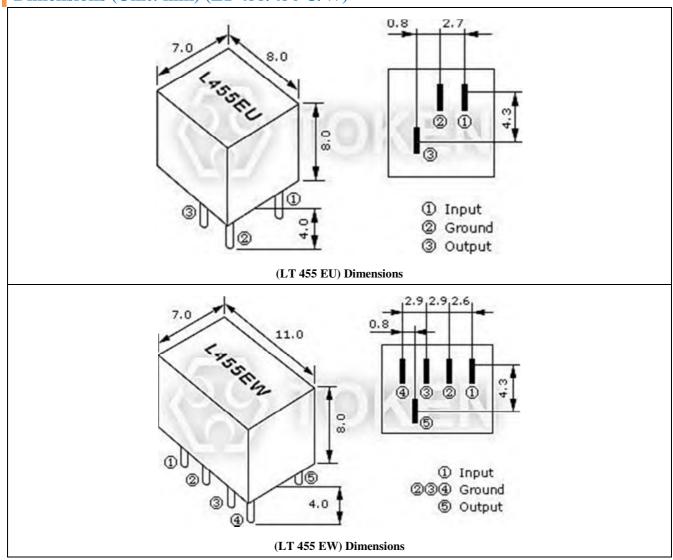
Taiwan Factory: +886 2 29810109 China Factory: +86 755 26055363

Page: 1/5



# Dimensions

# Dimensions (Unit: mm) (LT 455/450 U/W)



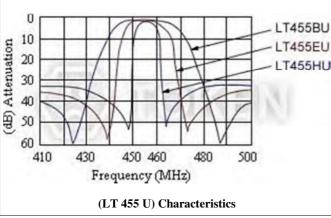
Taiwan Factory: +886 2 29810109
China Factory: +86 755 26055363

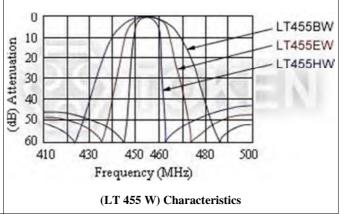


# Technical Characteristics

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

Part Number		Center Frequency (KHz)	Insertion Loss (dB) Max.	Pass Band Ripple (dB) Max.	6dB Band Width (KHz) Min.	40dB Band Width (KHz) Max. (LT455 U)	50dB Band Width (KHz) Max. (LT455 W)	Spur Attent fo±100K M (LT455 U)	uation Hz (dB)	Input / Output Impedance (Ω)
LT455AU	LT455AW	455±2.0	4	2	±17.5	±40	±35	28	40	1000
LT455BU	LT455BW	455±2.0	4	2	±15	±30	±30	28	40	1500
LT455CU	LT455CW	455±2.0	4	2	±12.5	±24	±24	28	40	1500
LT455DU	LT455DW	455±1.5	4	2	±10	±20	±20	28	40	1500
LT455EU	LT455EW	455±1.5	6	2	±7.5	±15	±15	28	40	1500
LT455FU	LT455FW	455±1.5	6	2	±6	±12.5	±12.5	28	40	2000
LT455GU	LT455GW	455±1.5	6	2	±4.5	±10	±10	28	40	2000
LT455HU	LT455HW	455±1.0	6	2	±3	±9	±9	28	40	2000
LT455IU	LT455IW	455±1.0	6	2	±2	±7.5	±7.5	28	40	2000
LT455HTU	LT455HTW	455±1.0	6	2	±3	±9	±9	35	60	2000





• Center frequency 450KHz is also available.

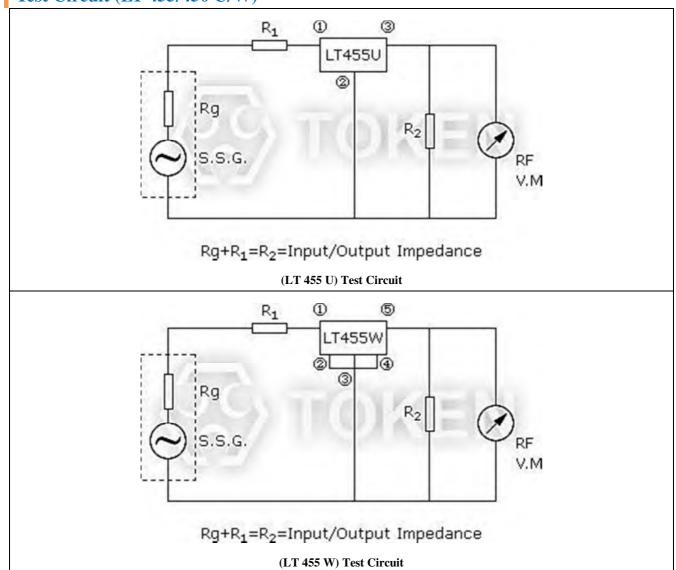
Taiwan Factory: +886 2 29810109 China Factory: +86 755 26055363

Page: 3/5



# Test Circuit

# Test Circuit (LT 455/450 U/W)



# Order Codes

# Order Codes (LT 455/450 U/W)

LT455BU	P			
Part Number	Package			

Taiwan Factory: +886 2 29810109 China Factory: +86 755 26055363



# (LT 455/450 U/W) Communication Ceramic Filters

# **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.

Taiwan Factory: +886 2 29810109 China Factory: +86 755 26055363

Page: 5/5