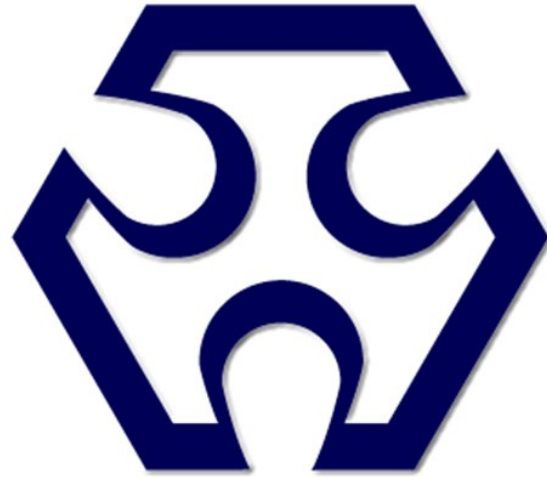


Version:  
January 11, 2017



# TOKEN

## (LT MB)

# Ceramic Filters

### **Token Electronics Industry Co., Ltd.**

**Taiwan:** No.137, Sec. 1, Zhongxing Rd., Wugu District,  
New Taipei City, Taiwan, R.O.C. 24872  
Tel: +886 2981 0109 Fax: +886 2988 7487

**China:** 12F, Zhong Xing Industry Bld., Chuang Ye Road,  
Nan Shan District, Shen Zhen City,  
Guang Dong, China 518054  
Tel: +86 755 26055363; Fax: +86 755 26055365

[Web: www.token.com.tw](http://www.token.com.tw)

[Email: rfq@token.com.tw](mailto:rfq@token.com.tw)



### ▶ Product Introduction

## Ceramic Filters for TV/VCR Stage (Murata SFE MB Compatible) 4.5 MHz ~ 6.5 MHz.

#### Features :

- Excellent spurious suppression characteristics within video signal band.
- Available 4 pass bandwidth variation to meet various requests.
- Low profile (H = 10.0mm max.).

Token utilizes the latest piezo filter technology enabling the most cost-effective designs in manufacturing LT MB series. The ceramic filter is primarily designed for piezoelectric lines and conforms to the RoHS directive and Lead-free. Ceramic filters for TV/VCR stage LT MB series can be customized designs and tighter tolerances available on request.

Application of ceramic filters specific designs also available including different piezo band-pass devices and Q specifications adjusted to frequency requirements. Token ceramic filters can supply you high performance, high quality and stability.

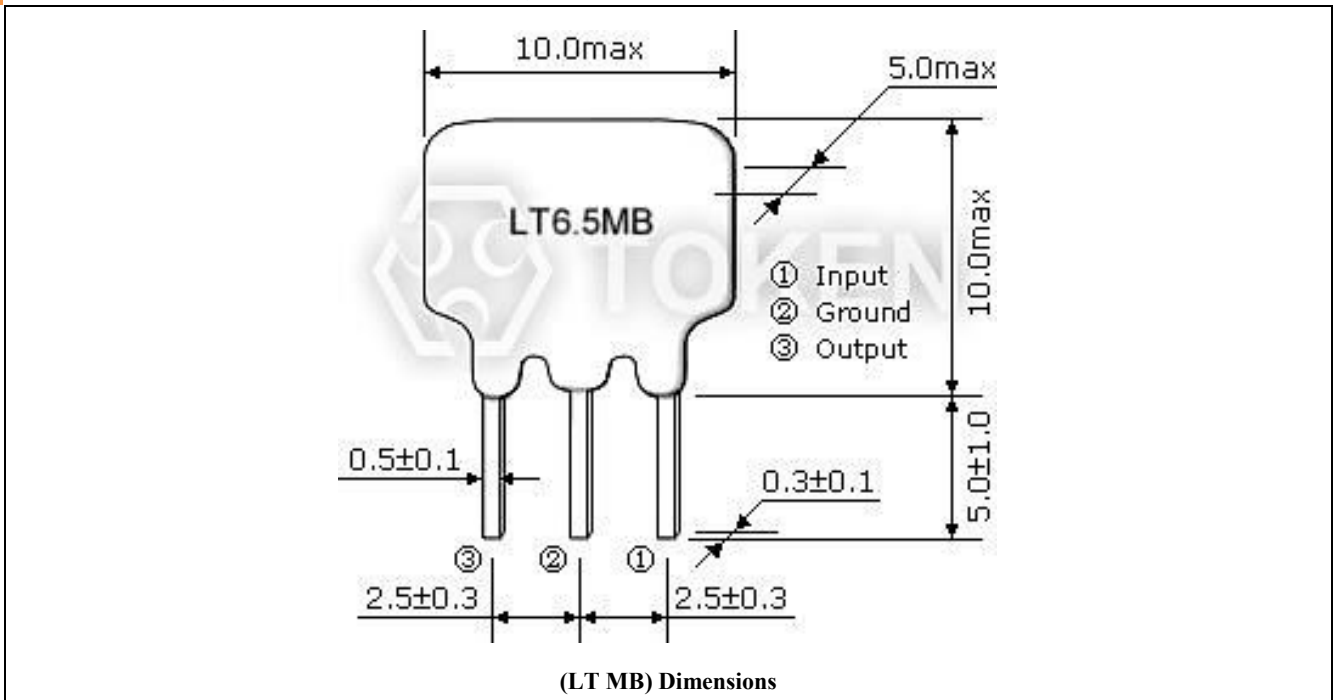
Token ceramic filters LT MB series are a high selectivity filter for 2 channel multi-sounds TV. Features with frequency adjustment-free, high performance and durability, and high selectivity.

Contact us with your specific needs. For more information, please link to Token official website "[Ceramic Filters](#)".



## ▶ Dimensions

### Dimensions (Unit: mm) (LT MB)

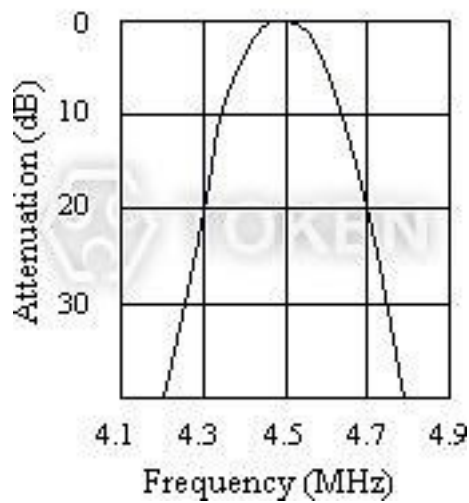


## ▶ Technical Characteristics

### Technical Characteristics (LT MB)

Part Number	Nominal Center Frequency (fo) (MHz)	3dB Band Width (kHz) min	20dB Band Width (kHz) max	Insert Loss (dB) max	Spurious Attenuation (dB) min	Input/Output Impedance (Ω)
LT4.5MB	4.500	fo±60	530	6.0	20(4.5 <sup>+0.8</sup> <sub>-1.0</sub> MHz)	1000
LT5.5MB	5.500	fo±75	550	6.0	25(5.5±1MHz)	600
LT6.0MB	6.000	fo±80	600	6.0	25(6.0±1MHz)	470
LT6.5MB	6.500	fo±80	630	6.0	25(6.5±1MHz) 30(6.5-1MHz)	470

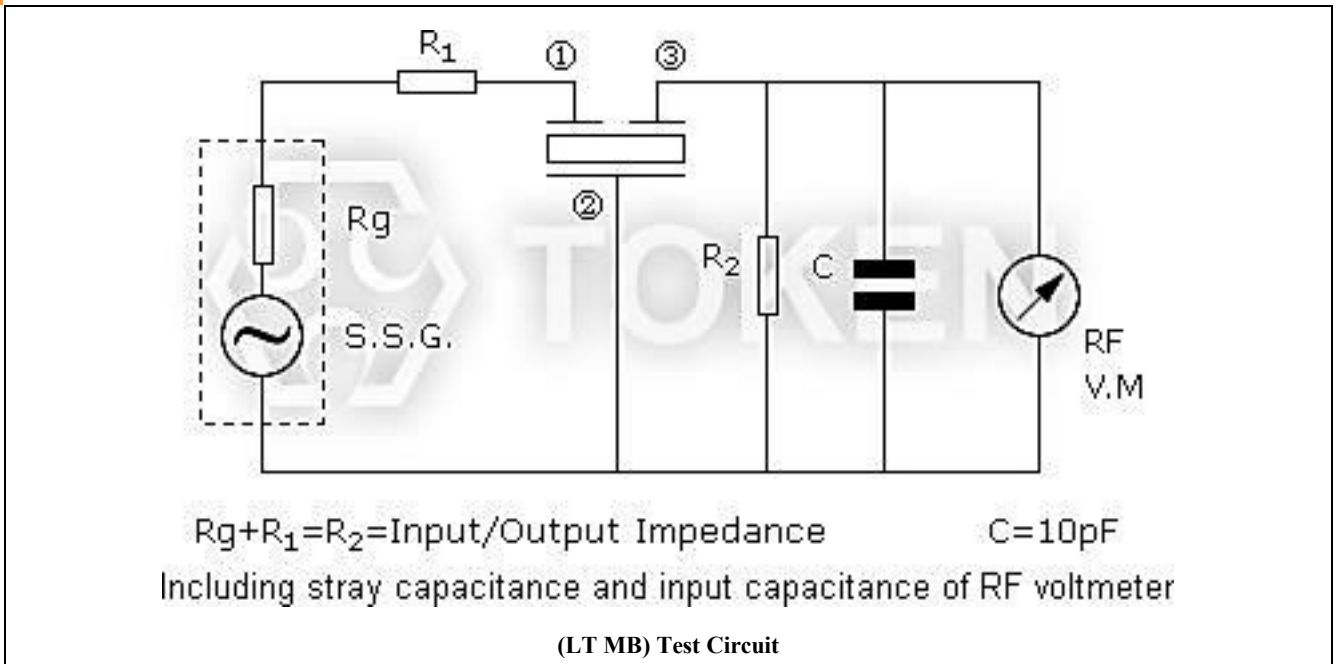
LT4.5MB



(LT MB) Characteristics

## ▶ Test Circuit

### Test Circuit (LT MB)



## ▶ Order Codes

### Order Codes (LT MB)

LT5.5MB	P
Part Number	Package

### ▶ 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.

