⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment
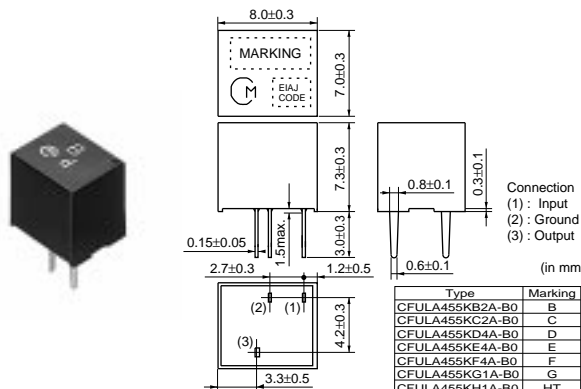
muRata

CERAFIL® Plastic Case General Use CFULA_A Series

CFULA_A series are high selectivity ceramic filters, which consist of 4 ceramic elements connected in a ladder form.
Most suitable for digital communications and cellular phones because of their improved GDT characteristics.

■ Features

1. High selectivity.
2. A variety of bandwidth available.
3. Excellent GDT characteristics are available within pass bandwidth.
4. Easily mounted on a printed circuit board
5. Operating temperature range : -20 to +80 (degree C)
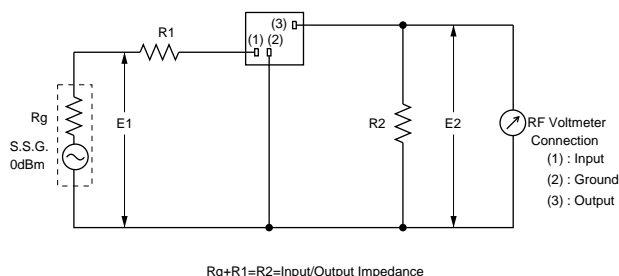   Storage temperature range   : -40 to +85 (degree C)

Type	Marking
CFULA455KB2A-B0	B
CFULA455KC2A-B0	C
CFULA455KD4A-B0	D
CFULA455KE4A-B0	E
CFULA455KF4A-B0	F
CFULA455KG1A-B0	G
CFULA455KH1A-B0	HT

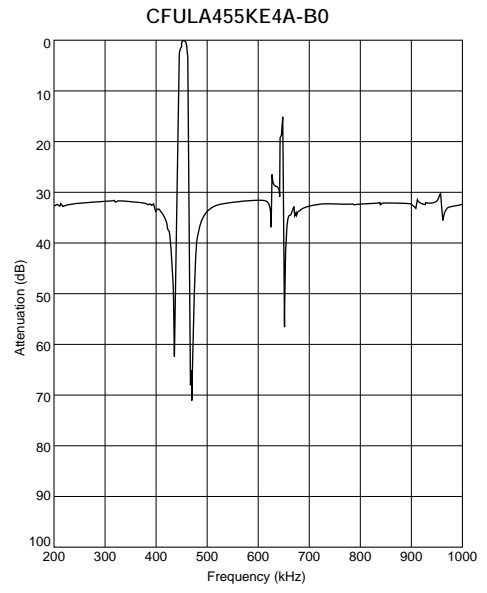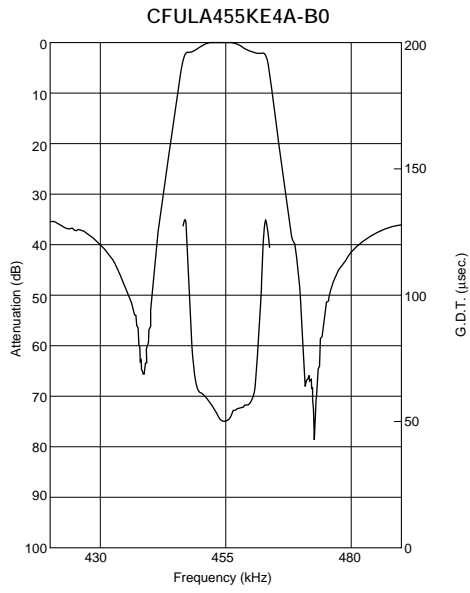| Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	Input/Output Impedance (ohm)
CFULA455KB2A-B0	455.0 ±2.0kHz	fn±15.0 min.	fn±30.0 max. [within 40dB]	27 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFULA455KC2A-B0	455.0 ±2.0kHz	fn±12.5 min.	fn±24.0 max. [within 40dB]	27 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFULA455KD4A-B0	455.0 ±1.5kHz	fn±10.0 min.	fn±20.0 max. [within 40dB]	27 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFULA455KE4A-B0	455.0 ±1.5kHz	fn±7.5 min.	fn±15.0 max. [within 40dB]	27 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	1500
CFULA455KF4A-B0	455.0 ±1.5kHz	fn±6.0 min.	fn±12.5 max. [within 40dB]	27 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFULA455KG1A-B0	455.0 ±1.0kHz	fn±4.5 min.	fn±10.0 max. [within 40dB]	25 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFULA455KH1A-B0	455.0 ±1.0kHz	fn±3.0 min.	fn±9.0 max. [within 40dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.

(fn) means nominal center frequency 455kHz.

The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.

10

■ Test Circuit

Rg+R1=R2=Input/Output Impedance

Note Please read rating and CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFULA455KE4A-B0

CFULA455KE4A-B0

10

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

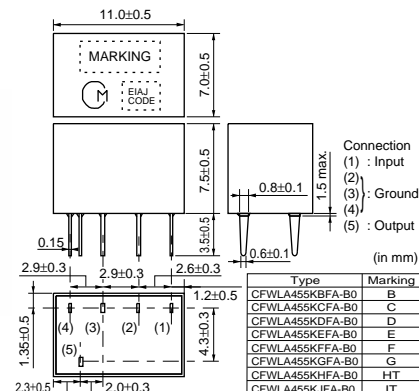# Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment

muRata

CERAFIL® Plastic Case Miniaturized Type CFWLA_A Series

Ceramic filter CFWLA_A series are low profile high selectivity ceramic filters which use 6 elements in ladder form.

They are best suitable to high-class transceivers, cordless telephones and amateur radios.
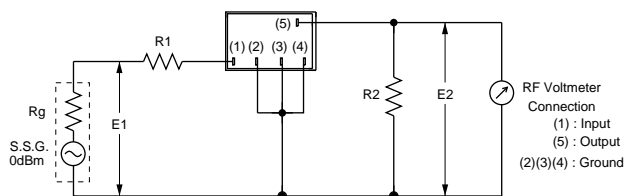
■ Features

1. Low profile, high selectivity.
2. Available bandwidths are B to J as standard.
3. Easily mountable on any PC board.
4. Operating temperature range : -20 to +80 (degree C)
   Storage temperature range   : -40 to +85 (degree C)

Type	Marking
CFWLA455KBFA-B0	B
CFWLA455KCFA-B0	C
CFWLA455KDFA-B0	D
CFWLA455KEFA-B0	E
CFWLA455KFFA-B0	F
CFWLA455KGFA-B0	G
CFWLA455KHFA-B0	HT
CFWLA455KJFA-B0	IT

Connection
(1) : Input
(2)
(3) : Ground
(4)
(5) : Output

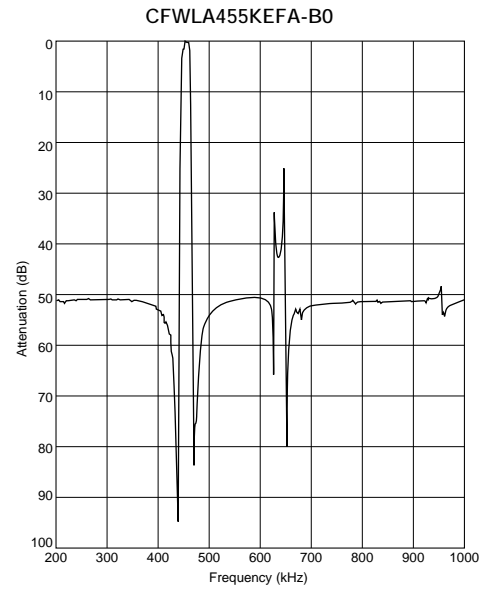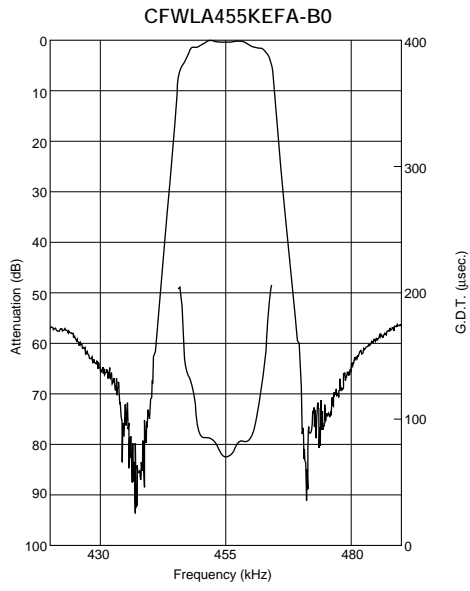| Part Number	Nominal Center Frequency (fn) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	Ripple (dB)	Input/Output Impedance (ohm)
CFWLA455KBFA-B0	455	fn±15.0 min.	fn±30.0 max. [within 50dB]	35 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	3.0 max. [within fn±10kHz]	1500
CFWLA455KCFA-B0	455	fn±12.5 min.	fn±24.0 max. [within 50dB]	35 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	3.0 max. [within fn±8kHz]	1500
CFWLA455KDFA-B0	455	fn±10.0 min.	fn±20.0 max. [within 50dB]	35 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	3.0 max. [within fn±7kHz]	1500
CFWLA455KEFA-B0	455	fn±7.5 min.	fn±15.0 max. [within 50dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	3.0 max. [within fn±5kHz]	1500
CFWLA455KFFA-B0	455	fn±6.0 min.	fn±12.5 max. [within 50dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	3.0 max. [within fn±4kHz]	2000
CFWLA455KGFA-B0	455	fn±4.5 min.	fn±10.0 max. [within 50dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2.0 max. [within fn±3kHz]	2000
CFWLA455KHFA-B0	455	fn±3.0 min.	fn±9.0 max. [within 50dB]	60 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2.0 max. [within fn±2kHz]	2000
CFWLA455KJFA-B0	455	fn±2.0 min.	fn±7.5 max. [within 50dB]	60 min. [within fn±100kHz]	7.0 max. [at minimum loss point]	2.0 max. [within fn±1.5kHz]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.

The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.

■ Test Circuit

RF Voltmeter
Connection
(1) : Input
(5) : Output
(2)(3)(4) : Ground

Rg+R1=R2=Input/Output Impedance

muRata

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFWLA455KEFA-B0

CFWLA455KEFA-B0

11

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment
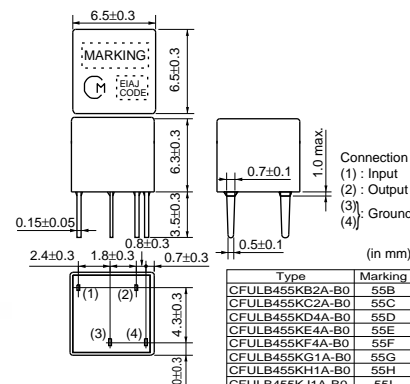
muRata

CERAFIL® Plastic Case Miniaturized Type CFULB_A Series

CFULB_A series ceramic filters are miniature, high performance ceramic filters composed of piezoelectric elements connected in a ladder form.
These filters, with only 6.3mm high, are 65% the volume of conventional types. (CFULA455K_A series) They are well suited for miniaturizing various kinds of communications equipment, pocket pagers, car radios, cordless telephones and mobile telephones.

Type	Marking
CFULB455KB2A-B0	55B
CFULB455KC2A-B0	55C
CFULB455KD4A-B0	55D
CFULB455KE4A-B0	55E
CFULB455KF4A-B0	55F
CFULB455KG1A-B0	55G
CFULB455KH1A-B0	55H
CFULB455KJ1A-B0	55I

Connection
(1) : Input
(2) : Output
(3) : Ground
(4)

(in mm)

■ Features

1. Miniature and high selectivity.
2. A variety of bandwidths are available.
3. Operating temperature range : -20 to +80 (degree C)
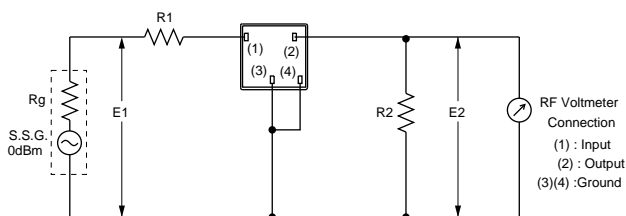   Storage temperature range   : -40 to +85 (degree C)

Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	Input/Output Impedance (ohm)
CFULB455KB2A-B0	455.0 ±2.0kHz	fn±15.0 min.	fn±30.0 max. [within 40dB]	27 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFULB455KC2A-B0	455.0 ±2.0kHz	fn±12.5 min.	fn±24.0 max. [within 40dB]	27 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFULB455KD4A-B0	455.0 ±1.5kHz	fn±10.0 min.	fn±20.0 max. [within 40dB]	27 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFULB455KE4A-B0	455.0 ±1.5kHz	fn±7.5 min.	fn±15.0 max. [within 40dB]	27 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	1500
CFULB455KF4A-B0	455.0 ±1.5kHz	fn±6.0 min.	fn±12.5 max. [within 40dB]	27 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFULB455KG1A-B0	455.0 ±1.0kHz	fn±4.5 min.	fn±10.0 max. [within 40dB]	25 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFULB455KH1A-B0	455.0 ±1.0kHz	fn±3.0 min.	fn±9.0 max. [within 40dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFULB455KJ1A-B0	455.0 ±1.0kHz	fn±2.0 min.	fn±7.5 max. [within 40dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.
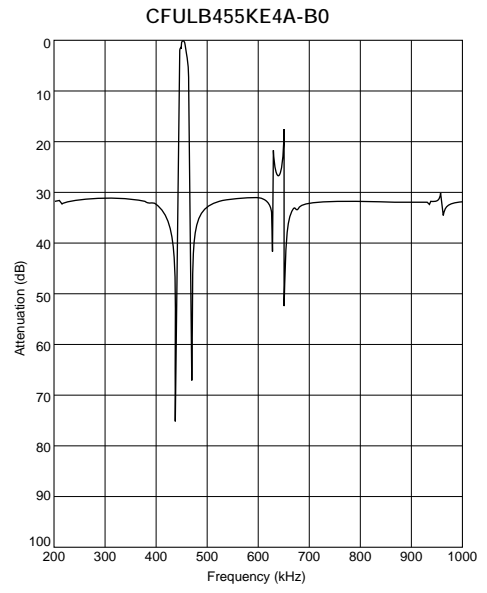(fn) means nominal center frequency 455kHz.
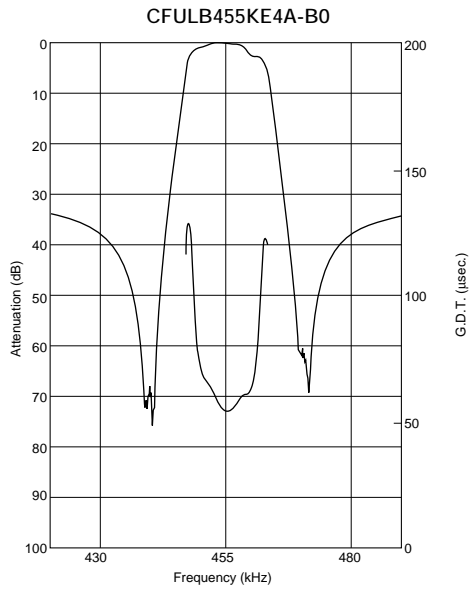The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.

■ Test Circuit

RF Voltmeter Connection
(1) : Input
(2) : Output
(3)(4) :Ground

Rg+R1=R2=Input/Output Impedance

12

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFULB455KE4A-B0

CFULB455KE4A-B0

12

⚠️Note Please read rating and ⚠️CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
         This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment   **muRata**
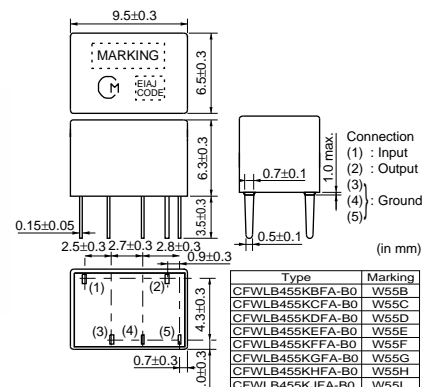
CERAFIL® Plastic Case General Use CFWLB_A Series

CFWLB_A series ceramic filters are miniature, high performance ceramic filters composed of piezoelectric elements connected in a ladder form.

These filters, with only 6.3mm high, are 67% the volume of conventional types. (CFWLB_A series) They are well suited for miniaturizing various kinds of communications equipment, pocket pagers, pagers, car radios, cordless telephones and mobile telephones.
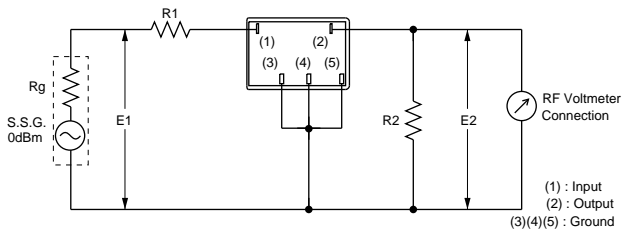
■ Features
1. Miniature and high selectivity.
2. A variety of bandwidths are available.
3. Operating temperature range : -20 to +80 (degree C)
   Storage temperature range   : -40 to +85 (degree C)

Type	Marking
CFWLB455KBFA-B0	W55B
CFWLB455KCFA-B0	W55C
CFWLB455KDFA-B0	W55D
CFWLB455KEFA-B0	W55E
CFWLB455KFFA-B0	W55F
CFWLB455KGFA-B0	W55G
CFWLB455KHFA-B0	W55H
CFWLB455KJFA-B0	W55I

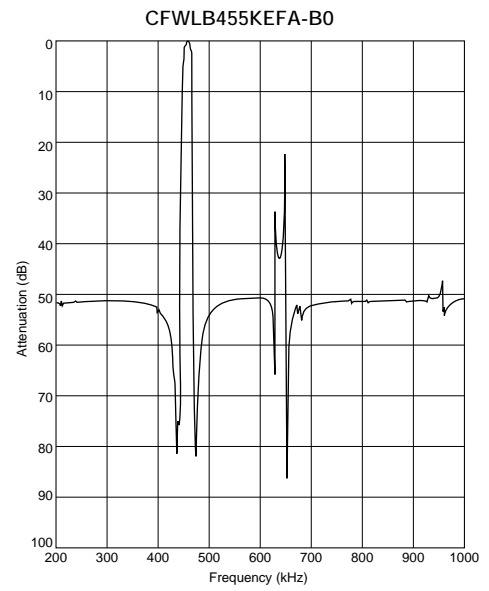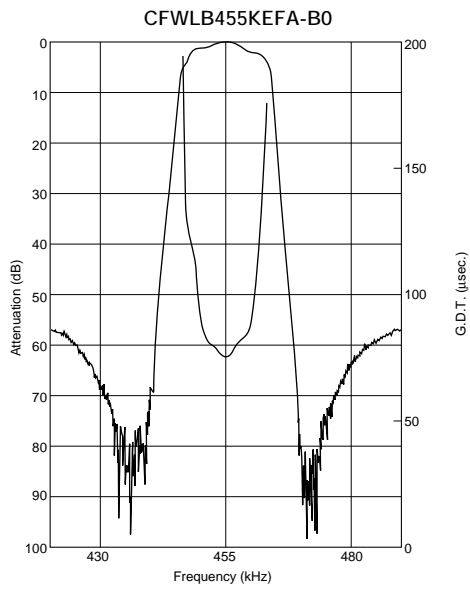| Part Number	Nominal Center Frequency (fn) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	Input/Output Impedance (ohm)
CFWLB455KBFA-B0	455	fn±15.0 min.	fn±30.0 max. [within 50dB]	35 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFWLB455KCFA-B0	455	fn±12.5 min.	fn±24.0 max. [within 50dB]	35 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFWLB455KDFA-B0	455	fn±10.0 min.	fn±20.0 max. [within 50dB]	35 min. [within fn±100kHz]	4.0 max. [at minimum loss point]	1500
CFWLB455KEFA-B0	455	fn±7.5 min.	fn±15.0 max. [within 50dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	1500
CFWLB455KEFA004-B0	455	fn±7.5 min.	fn±15.0 max. [within 60dB]	60 min. [within fn±15kHz to 30kHz]	5.0 max. [at fn]	1500
CFWLB455KFFA-B0	455	fn±6.0 min.	fn±12.5 max. [within 50dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFWLB455KGFA-B0	455	fn±4.5 min.	fn±10.0 max. [within 50dB]	35 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFWLB455KHFA-B0	455	fn±3.0 min.	fn±9.0 max. [within 50dB]	55 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	2000
CFWLB455KJFA-B0	455	fn±2.0 min.	fn±7.0 max. [within 50dB]	55 min. [within fn±100kHz]	7.0 max. [at minimum loss point]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.
The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.

13

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Test Circuit

Rg+R1=R2=Input/Output Impedance

■ Frequency Characteristics

CFWLB455KEFA-B0

CFWLB455KEFA-B0

13

muRata

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment
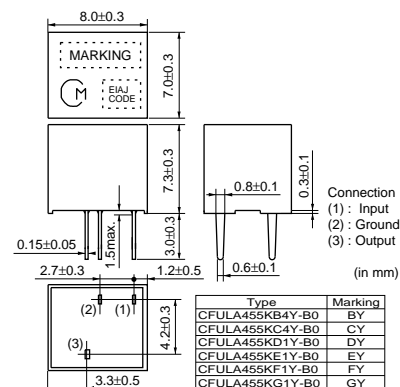
muRata

CERAFIL® Plastic Case Group Delay Flat Type CFULA_Y Series

CFULA_Y series are high selectivity ceramic filters, which consist of 4 ceramic elements connected in a ladder form.
Most suitable for digital communications and cellular phones because of their improved GDT characteristics.

■ Features

1. High selectivity.
2. A variety of bandwidth available.
3. Excellent GDT characteristics are available within pass bandwidth.
4. Easily mounted on a printed circuit board
5. Operating temperature range : -20 to +80 (degree C)
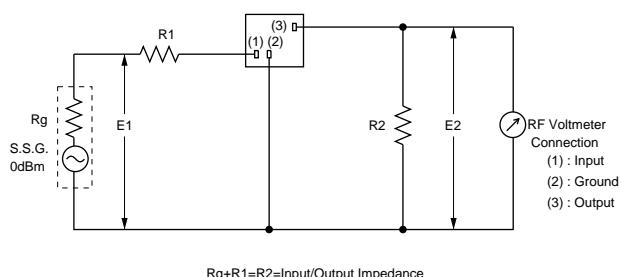   Storage temperature range   : -40 to +85 (degree C)

Type	Marking
CFULA455KB4Y-B0	BY
CFULA455KC4Y-B0	CY
CFULA455KD1Y-B0	DY
CFULA455KE1Y-B0	EY
CFULA455KF1Y-B0	FY
CFULA455KG1Y-B0	GY

Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	GDT Deviation (μs)	Input/Output Impedance (ohm)
CFULA455KB4Y-B0	455.0 ±1.5kHz	fn±15.0 min.	fn±35.0 max. [within 40dB]	25 min. [within fn±100kHz]	5.0 max. [at minimum loss point]	15.0 max. [within fn±10kHz]	1500
CFULA455KC4Y-B0	455.0 ±1.5kHz	fn±12.5 min.	fn±30.0 max. [within 40dB]	25 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	15.0 max. [within fn±8kHz]	1500
CFULA455KD1Y-B0	455.0 ±1.0kHz	fn±10.0 min.	fn±25.0 max. [within 40dB]	23 min. [within fn±100kHz]	7.0 max. [at minimum loss point]	20.0 max. [within fn±7kHz]	1500
CFULA455KE1Y-B0	455.0 ±1.0kHz	fn±7.5 min.	fn±20.0 max. [within 40dB]	23 min. [within fn±100kHz]	8.0 max. [at minimum loss point]	20.0 max. [within fn±5kHz]	1500
CFULA455KF1Y-B0	455.0 ±1.0kHz	fn±6.0 min.	fn±17.5 max. [within 40dB]	23 min. [within fn±100kHz]	9.0 max. [at minimum loss point]	20.0 max. [within fn±4kHz]	2000
CFULA455KG1Y-B0	455.0 ±1.0kHz	fn±4.5 min.	fn±15.0 max. [within 40dB]	23 min. [within fn±100kHz]	10.0 max. [at minimum loss point]	20.0 max. [within fn±3kHz]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.
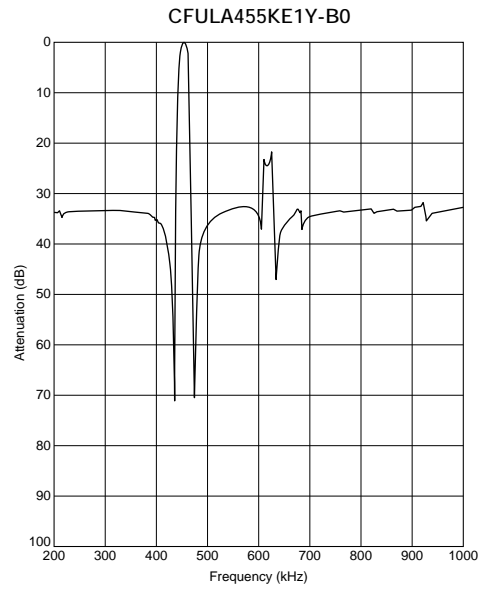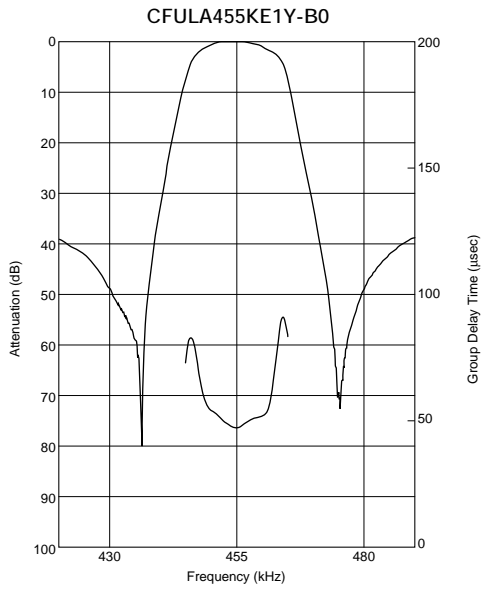(fn) means nominal center frequency 455kHz.
The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.

■ Test Circuit

Rg+R1=R2=Input/Output Impedance

14

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFULA455KE1Y-B0

CFULA455KE1Y-B0

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.
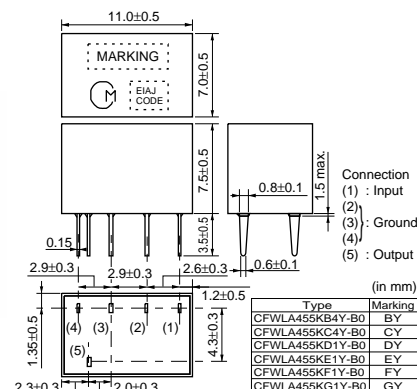
P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment

muRata

CERAFIL® Plastic Case Group Delay Flat Type CFWLA_Y Series

CFWLA_Y series are high selectivity ceramic filters, which consist of 6 ceramic elements connected in a ladder form.
Most suitable for digital communications and mobile telephones because of their improved GDT characteristics.
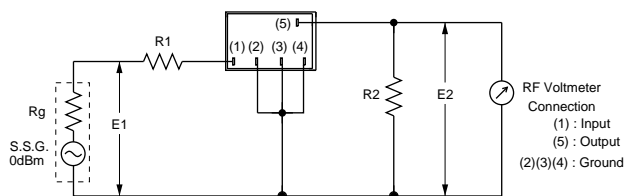
■ Features

1. High selectivity.
2. A variety of bandwidths are available.
3. Excellent GDT characteristics are available within pass bandwidth.
4. Easily mounted on a printed circuit board
5. Operating temperature range : -20 to +80 (degree C)
   Storage temperature range   : -40 to +85 (degree C)

Type	Marking
CFWLA455KB4Y-B0	BY
CFWLA455KC4Y-B0	CY
CFWLA455KD1Y-B0	DY
CFWLA455KE1Y-B0	EY
CFWLA455KF1Y-B0	FY
CFWLA455KG1Y-B0	GY

Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	GDT Deviation (μs)	Input/Output Impedance (ohm)
CFWLA455KB4Y-B0	455.0 ±1.5kHz	fn±15.0 min.	fn±35.0 max. [within 50dB]	40 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	30.0 max. [within fn±10kHz]	1500
CFWLA455KC4Y-B0	455.0 ±1.5kHz	fn±12.5 min.	fn±30.0 max. [within 50dB]	40 min. [within fn±100kHz]	7.0 max. [at minimum loss point]	30.0 max. [within fn±8kHz]	1500
CFWLA455KD1Y-B0	455.0 ±1.0kHz	fn±10.0 min.	fn±25.0 max. [within 50dB]	40 min. [within fn±100kHz]	8.0 max. [at minimum loss point]	30.0 max. [within fn±7kHz]	1500
CFWLA455KE1Y-B0	455.0 ±1.0kHz	fn±7.5 min.	fn±20.0 max. [within 50dB]	40 min. [within fn±100kHz]	9.0 max. [at minimum loss point]	30.0 max. [within fn±5kHz]	1500
CFWLA455KF1Y-B0	455.0 ±1.0kHz	fn±6.0 min.	fn±17.5 max. [within 50dB]	40 min. [within fn±100kHz]	10.0 max. [at minimum loss point]	40.0 max. [within fn±4kHz]	2000
CFWLA455KG1Y-B0	455.0 ±1.0kHz	fn±4.5 min.	fn±15.0 max. [within 50dB]	40 min. [within fn±100kHz]	11.0 max. [at minimum loss point]	40.0 max. [within fn±3kHz]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.
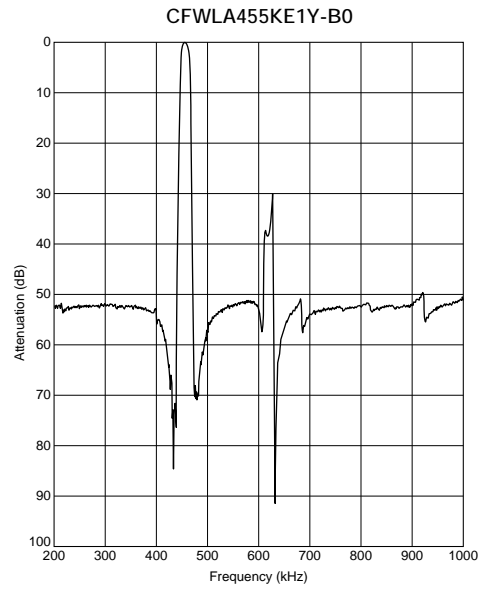(fn) means nominal center frequency 455kHz.
The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.

■ Test Circuit

Rg+R1=R2=Input/Output Impedance

15

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFWLA455KE1Y-B0

CFWLA455KE1Y-B0

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment

muRata

CERAFIL® Plastic Case Group Delay Flat Type Miniaturized Type CFULB_Y Series

Ceramic filter CFULB_Y series are miniature and high performance filters. These filters, with only 6.3mm high, are 65% the volume of conventional types (CFULA455K_Y series).
Well suited for miniaturizing the communications equipment, especially for a cellular phone.

6.5±0.3

MARKING

EIAJ CODE

6.5±0.3
6.3±0.3
3.5±0.3
1.0 max.
0.7±0.1
0.15±0.05
0.8±0.3
0.7±0.3
2.4±0.3 1.8±0.3
0.5±0.1
(1) (2)
(3) (4)
4.3±0.3
1.0±0.3

Connection
(1) : Input
(2) : Output
(3) : Ground
(4) :

(in mm)

Type	Marking
CFULB455KB4Y-B0	BY
CFULB455KC4Y-B0	CY
CFULB455KD1Y-B0	DY
CFULB455KE1Y-B0	EY
CFULB455KF1Y-B0	FY
CFULB455KG1Y-B0	GY

■ Features

1. Miniature, flat GDT characteristics.
2. Suitable for a cellular phone.
3. A variety of band width are available.
4. Operating temperature range : -20 to +80 (degree C)
   Storage temperature range : -40 to +85 (degree C)

Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	GDT Deviation (μs)	Input/Output Impedance (ohm)
CFULB455KB4Y-B0	455.0 ±1.5kHz	fn±15.0 min.	fn±35.0 max. [within 40dB]	25 min. [within fn±100kHz]	5.0 max. [at minimum loss point]	15.0 max. [within fn±10kHz]	1500
CFULB455KC4Y-B0	455.0 ±1.5kHz	fn±12.5 min.	fn±30.0 max. [within 40dB]	25 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	15.0 max. [within fn±8kHz]	1500
CFULB455KD1Y-B0	455.0 ±1.0kHz	fn±10.0 min.	fn±25.0 max. [within 40dB]	23 min. [within fn±100kHz]	7.0 max. [at minimum loss point]	20.0 max. [within fn±7kHz]	1500
CFULB455KE1Y-B0	455.0 ±1.0kHz	fn±7.5 min.	fn±20.0 max. [within 40dB]	23 min. [within fn±100kHz]	8.0 max. [at minimum loss point]	20.0 max. [within fn±5kHz]	1500
CFULB455KF1Y-B0	455.0 ±1.0kHz	fn±6.0 min.	fn±17.5 max. [within 40dB]	23 min. [within fn±100kHz]	9.0 max. [at minimum loss point]	20.0 max. [within fn±4kHz]	2000
CFULB455KG1Y-B0	455.0 ±1.0kHz	fn±4.5 min.	fn±15.0 max. [within 40dB]	23 min. [within fn±100kHz]	10.0 max. [at minimum loss point]	20.0 max. [within fn±3kHz]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.
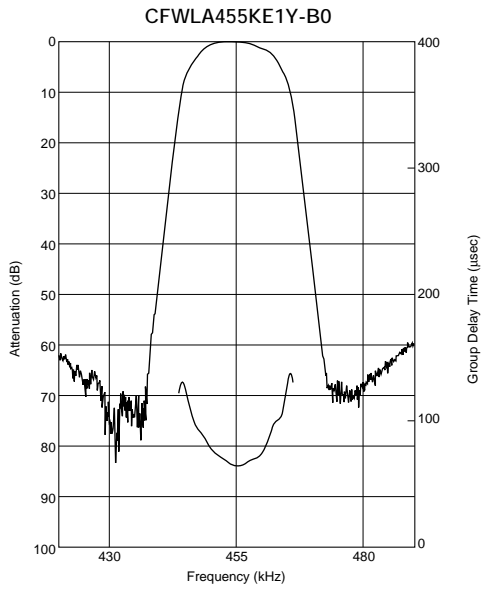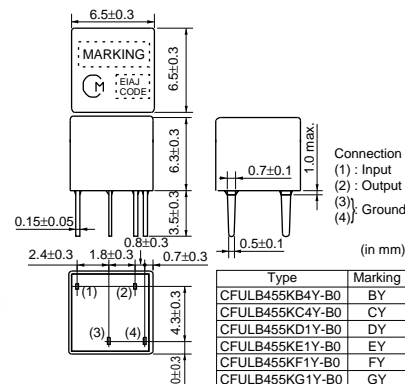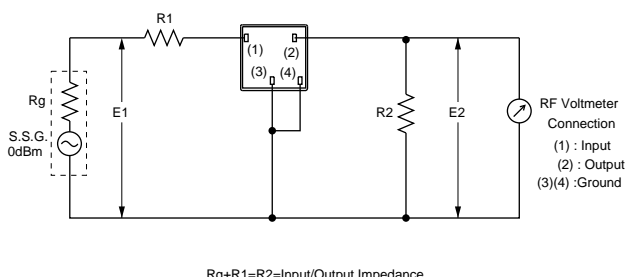(fn) means nominal center frequency 455kHz.
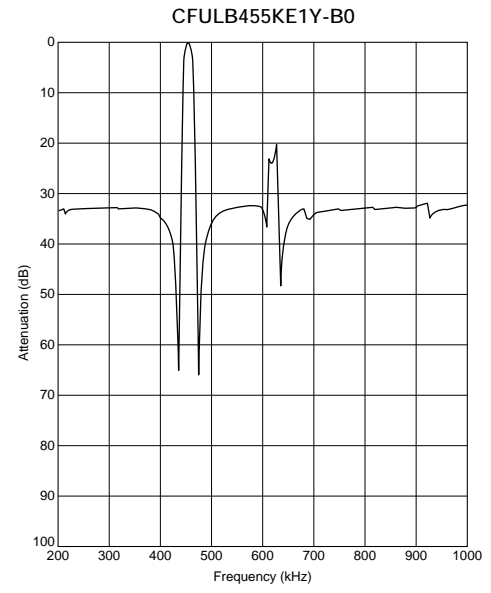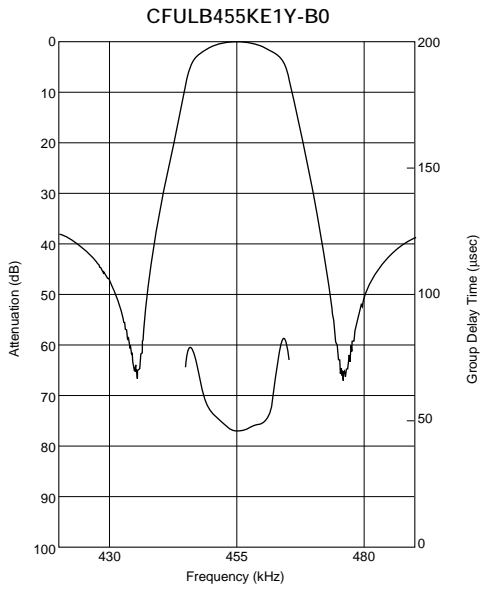The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.
CFULB455K_Y series filters are 4-element ceramic filters and miniature versions of CFULA455K_Y series.

■ Test Circuit

R1
(1) (2)
(3) (4)
Rg
E1
R2
E2
RF Voltmeter
Connection
(1) : Input
(2) : Output
(3)(4) :Ground
S.S.G.
0dBm

Rg+R1=R2=Input/Output Impedance

16

Note Please read rating and CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFULB455KE1Y-B0

CFULB455KE1Y-B0

16

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.
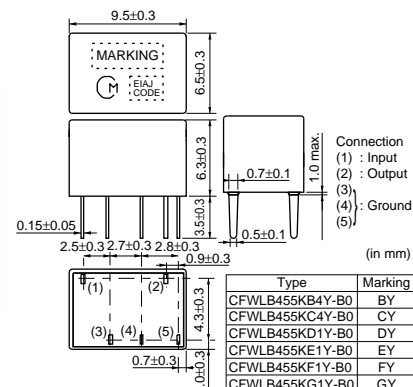
P05E11.pdf 02.9.2

Ceramic Filters (CERAFIL®)/Ceramic Discriminators for Communications Equipment

muRata

CERAFIL® Plastic Case Group Delay Flat Type CFWLB_Y Series

Ceramic filter CFWLB_Y series are miniature and high-performance filters. These filters, with only 6.3mm high, are 67% the volume of conventional types (CFWLA455K_Y series).
Well suited for miniaturizing the communications equipment, especially for a cellular phone.

9.5±0.3

MARKING
EIAJ CODE

6.5±0.3
6.3±0.3
3.5±0.3
0.7±0.1
1.0 max.
0.5±0.1
0.15±0.05
2.5±0.3 2.7±0.3 2.8±0.3
0.9±0.3
4.3±0.3
1.0±0.3
0.7±0.3

Connection
(1) : Input
(2) : Output
(3)
(4) : Ground
(5)

(in mm)

Type	Marking
CFWLB455KB4Y-B0	BY
CFWLB455KC4Y-B0	CY
CFWLB455KD1Y-B0	DY
CFWLB455KE1Y-B0	EY
CFWLB455KF1Y-B0	FY
CFWLB455KG1Y-B0	GY

■ Features

1. Miniature, flat GDT characteristics.
2. Suitable for a cellular phone.
3. A variety of band width are available.
4. Operating temperature range : -20 to +80 (degree C)
   Storage temperature range   : -40 to +85 (degree C)

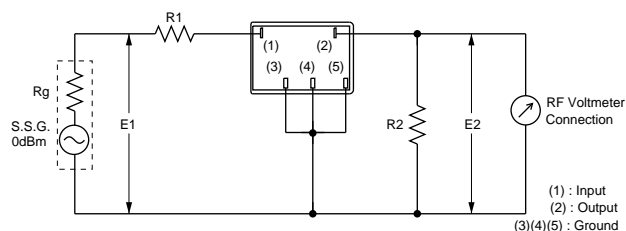| Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Stop Bandwidth (kHz)	Stop Band Attenuation (dB)	Insertion Loss (dB)	GDT Deviation (μs)	Input/Output Impedance (ohm)
CFWLB455KB4Y-B0	455.0 ±1.5kHz	fn±15.0 min.	fn±30.0 max. [within 50dB]	40 min. [within fn±100kHz]	6.0 max. [at minimum loss point]	30.0 max. [within fn±10kHz]	1500
CFWLB455KC4Y-B0	455.0 ±1.5kHz	fn±12.5 min.	fn±27.5 max. [within 50dB]	40 min. [within fn±100kHz]	7.0 max. [at minimum loss point]	30.0 max. [within fn±8kHz]	1500
CFWLB455KD1Y-B0	455.0 ±1.0kHz	fn±10.0 min.	fn±25.0 max. [within 50dB]	40 min. [within fn±100kHz]	8.0 max. [at minimum loss point]	30.0 max. [within fn±7kHz]	1500
CFWLB455KE1Y-B0	455.0 ±1.0kHz	fn±7.5 min.	fn±20.0 max. [within 50dB]	40 min. [within fn±100kHz]	9.0 max. [at minimum loss point]	30.0 max. [within fn±5kHz]	1500
CFWLB455KF1Y-B0	455.0 ±1.0kHz	fn±6.0 min.	fn±17.5 max. [within 50dB]	40 min. [within fn±100kHz]	10.0 max. [at minimum loss point]	40.0 max. [within fn±4kHz]	2000
CFWLB455KG1Y-B0	455.0 ±1.0kHz	fn±4.5 min.	fn±15.0 max. [within 50dB]	40 min. [within fn±100kHz]	11.0 max. [at minimum loss point]	40.0 max. [within fn±3kHz]	2000

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters.
(fn) means nominal center frequency 455kHz.
The order quantity should be an integral multiple of the "Minimum Quantity" shown in package page in this catalog.
CFWLB455K_Y series filters are 4-element ceramic filters and miniature versions of CFWLA455K_Y series.

■ Test Circuit

R1
(1)   (2)
(3) (4) (5)
Rg
E1
S.S.G.
0dBm
R2
E2
RF Voltmeter
Connection
(1) : Input
(2) : Output
(3)(4)(5) : Ground

Rg+R1=R2=Input/Output Impedance

17

muRata

45

⚠Note Please read rating and ⚠CAUTION (for storage and operating, rating, soldering and mounting, handling) in this PDF catalog to prevent smoking and/or burning, etc.
This catalog has only typical specifications. Therefore, you are requested to approve our product specification or to transact the approval sheet for product specificaion before ordering.

P05E11.pdf 02.9.2

■ Frequency Characteristics

CFWLB455KE1Y-B0

CFWLB455KE1Y-B0

muRata