

CERAFIL®

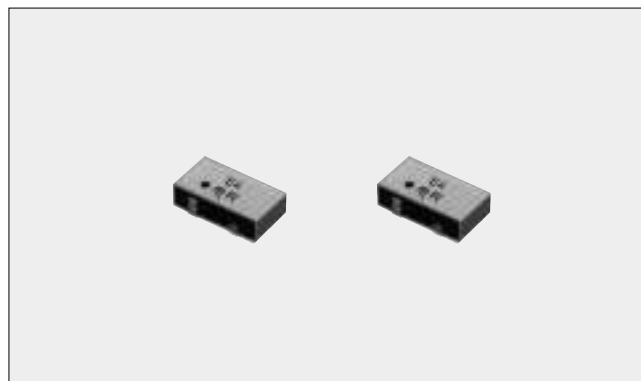
*CERAFIL® is the Registered Trademark
of Murata Manufacturing Co., Ltd.SMD Ceramic Filter for Communications Equipment **CFWC455 Series**

Chip Ceramic Filter for Automatic Insertion and Reflow Soldering

The CFWC455 series consist of 6 ceramic elements. The filters are recommended for digital communication applications and are perfect in hand held phones.

■FEATURES

1. The filters are mountable by automatic placers.
2. The filters can be reflow soldered and withstand washing.
3. They are slim, at only 3.0mm maximum thickness, and have a small mounting area (11.5×7.5mm) enable flexible PCB design.
4. The filters are wide bandwidth, flat G.D.T. within pass band.
5. Operating temperature range : -20°C to +80°C
Storage temperature range : -40°C to +85°C

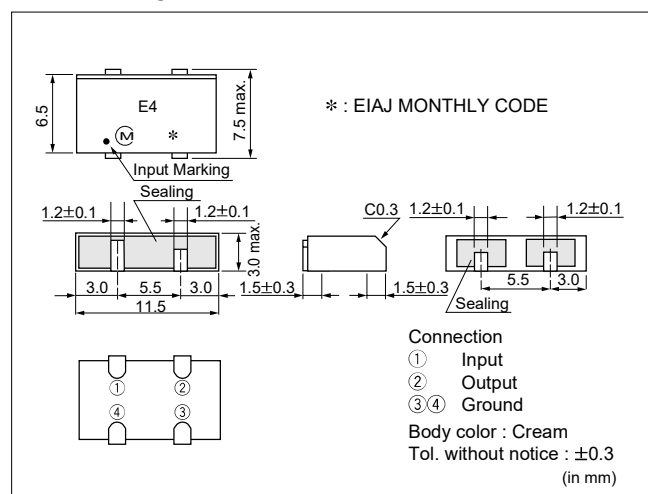


■SPECIFICATIONS

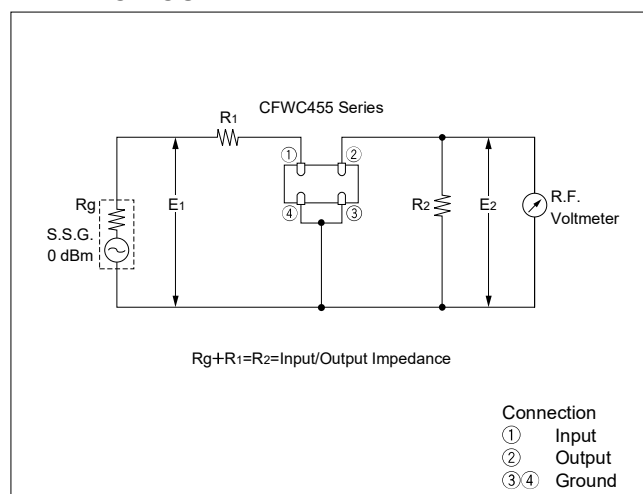
Character- istics Part Number	Nominal Center Frequency(fn) (kHz)	3dB Bandwidth (from fn) (kHz)	50dB Bandwidth (from fn) (kHz)	Stop Band Attenuation within fn ±18—±33 (dB)	within fn ±100kHz (dB)	Spurious Response within 0.1—1.0MHz (dB)	Insertion Loss (at fn) (dB)	Ripple (dB)	G.D.T. Ripple Deviation (μ sec.)	Input /Output Impedance (kΩ)
CFWC455E1	455	±6.5min.	±15.0max.	55min.	50min.	20min.	4.0max.	(±6.5) 3.0max.	—	—
CFWC455E4	455	±6.5min.	±15.5max.	55min.	50min.	20min.	4.0max.	(±6.5) 2.0max.	(±3kHz) 20max.	(±5kHz) 50max.

Note : For tape and reel packaging, the suffix is "-TC". For example, CFWC455E1-TC.

■DIMENSIONS

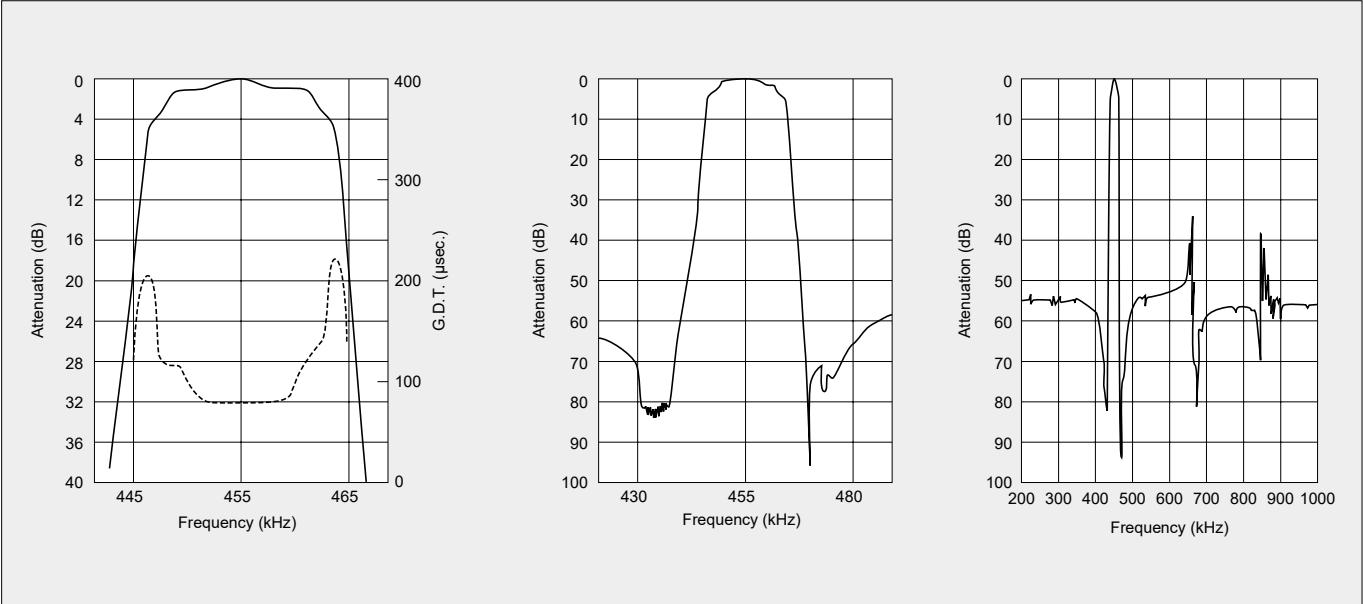


■TEST CIRCUIT



Note : To take best advantage of safety features of ceramic filters, connect B type filter's output to IF amplifier through DC cut capacitor.
Avoid to apply direct current output of B type filter.

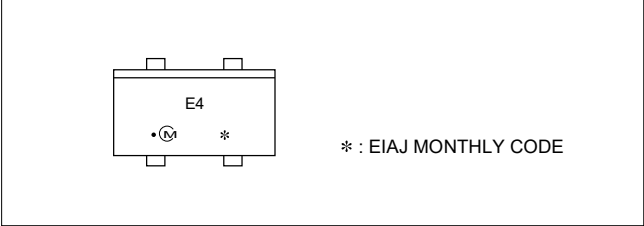
■FREQUENCY CHARACTERISTICS (CFWC455E4)



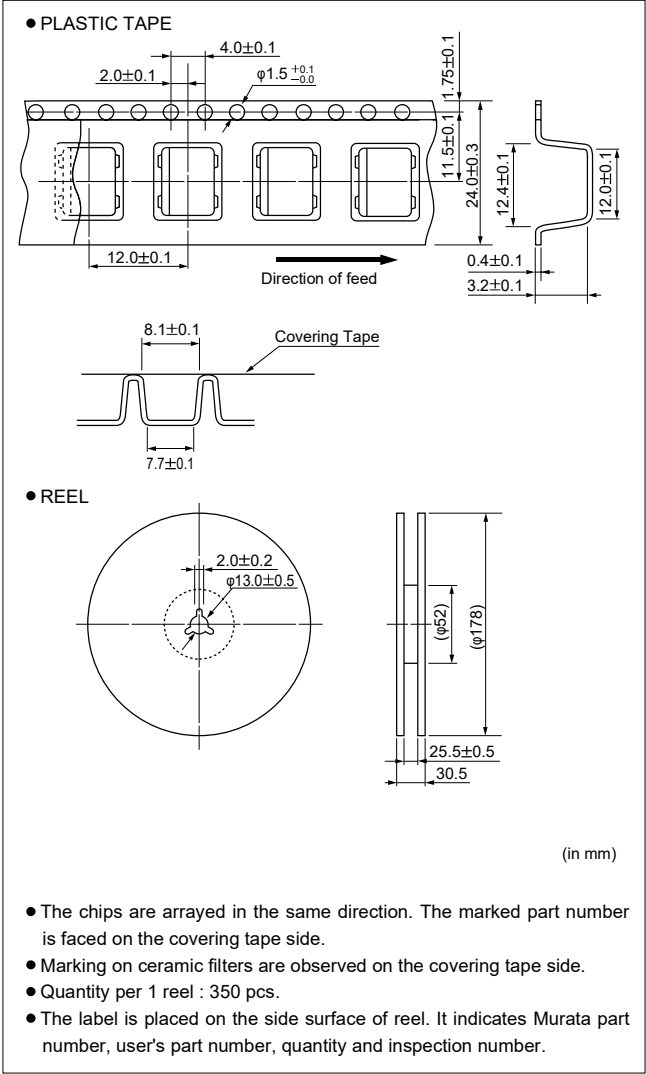
■MARKING

Part Number	Marking
CFWC455E1	E1
CFWC455E4	E4

(Ex.) CFWC455E4



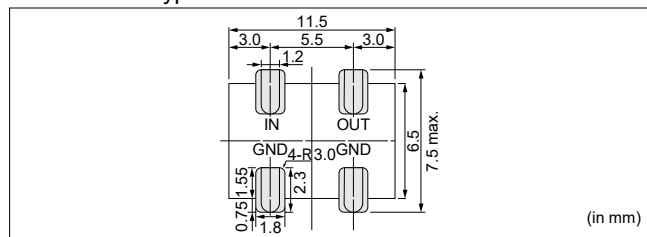
■DIMENSIONS



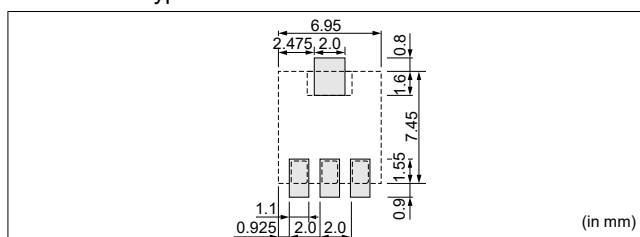
SMD Type Ceramic Filter for Communications Equipment Applications

STANDARD LAND DIMENSIONS

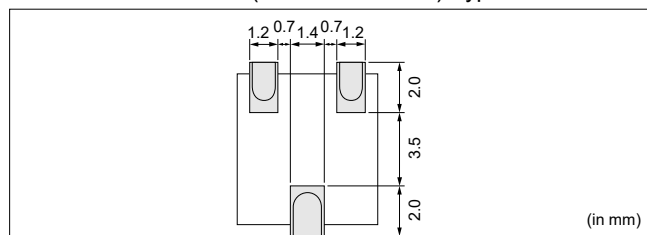
CFWC455 Type



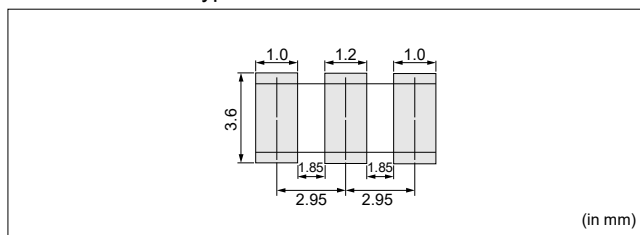
SFPC455 Type



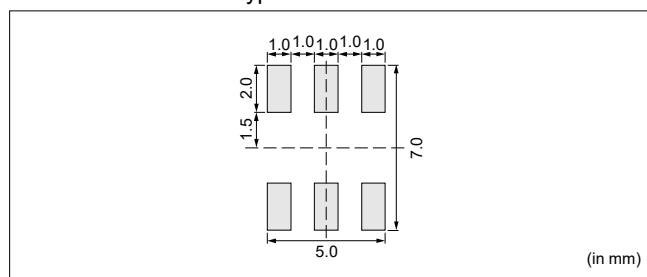
CFUCG/SFGCG455 (KMFC626 Series) Type



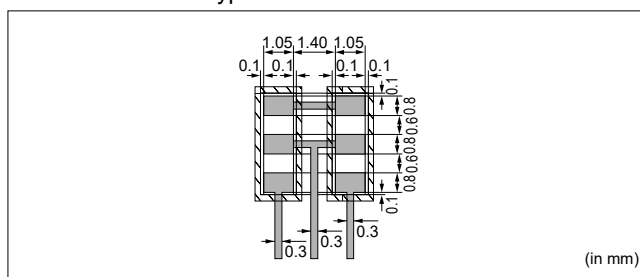
CFEC10.8M□ Type



CFUXC450C100H Type



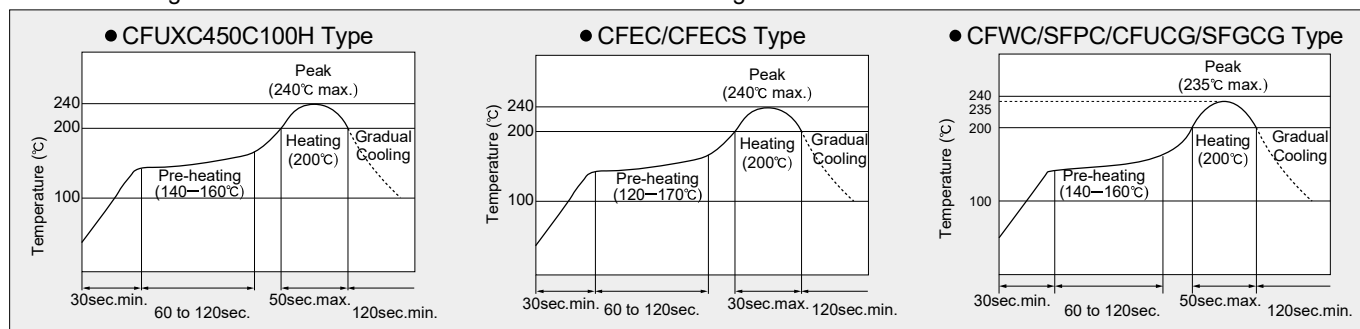
CFECS10.8M□ Type



SOLDERING CONDITIONS

(1) Reflow Soldering

Reflow soldering should be carried out one time with standard soldering conditions below.



(2) Soldering with Iron

Soldering conditions : Soldering iron temperature $350 \pm 5^\circ\text{C}$
(CFECS type : $280 \pm 5^\circ\text{C}$)
Soldering time 3 ± 1 seconds.

CLEANING CONDITIONS

In case of SMD type ceramic filter, washing after reflow soldering shall be allowed only when the components temperature is cooled down to room temperature.

(*Please avoid using ultrasonic cleaning. For washing liquid, please consult with us to avoid possible damage during washing process.)

Please contact us concerning cleaning method before use. For protection of ozone layer, we also investigate the non ODC cleaning process for our devices. For more details, please contact us before use.