

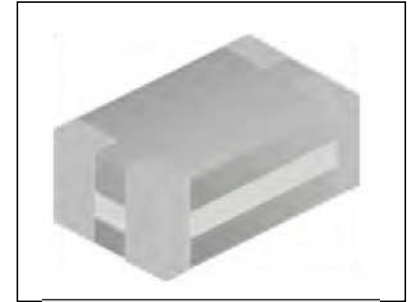
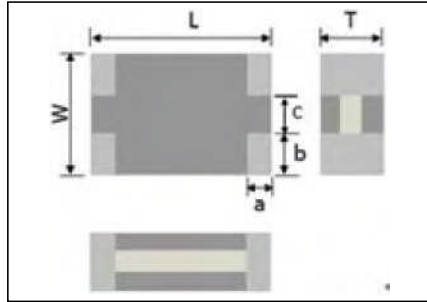
## High Frequency Devices-Common Mode Filter-RGCMF1210080V T

### How to Order

RG	CMF	121008	0	V		T
<b>Walsin</b> RF Device	<b>Product code</b> CMF:Common Mode Filter	<b>Dimension code</b> 121008 = Length=12 Width=10 Thickness=08 121010 = Length=12 Width=10 Thickness=10	<b>Unit of dimension</b> 0: 0.1 mm 1: 1.0 mm	<b>Application</b> V: High Speed Transmission Lines HDMI/ SATA (mini)LVDS PCI-E/ DVI Display Port	<b>Specification</b> Design Code	<b>Packing</b> T= Reeled

### Dimensions

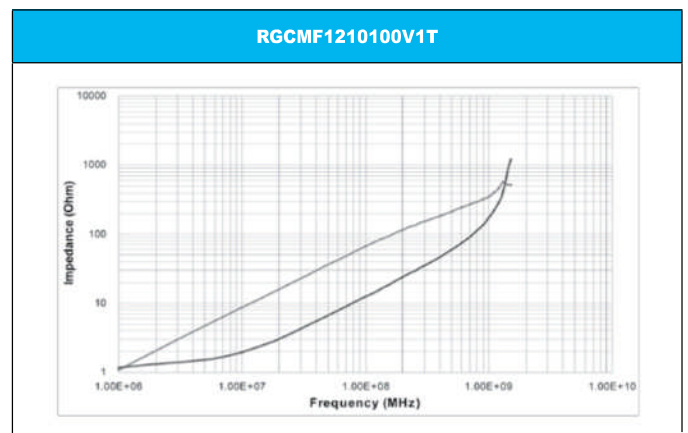
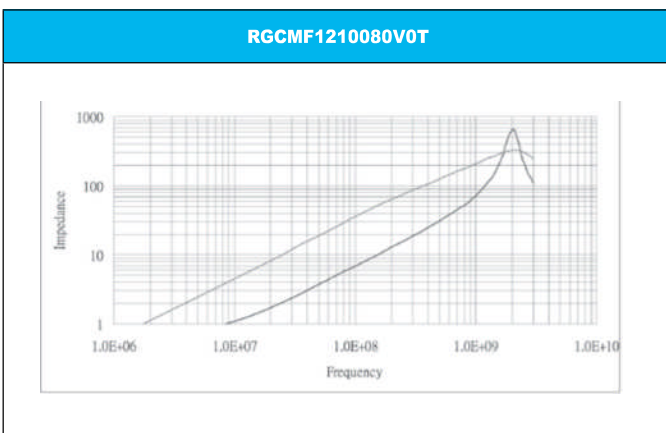
Symbol	RGCMF1210080VOT	RGCMF1210100V1T
L	1.25mm ± 0.10 mm	1.25mm ± 0.1 mm
W	1.02mm ± 0.10 mm	1.02mm ± 0.1 mm
T	0.80mm ± 0.10 mm	1.00mm ± 0.1 mm
a	0.25mm ± 0.10 mm	0.25mm ± 0.1 mm
b	0.37mm ± 0.10 mm	0.36mm ± 0.1 mm
c	0.28mm ± 0.10 mm	0.27mm ± 0.1 mm



### RGCMF1210080V T Series

Item	RGCMF1210080VOT	Item	RGCMF1210100V1T
Characteristic Impedance	100 ohm (Typical)	Characteristic Impedance	100 ohm (Typical)
DC Resistance	Max. 1.0 ohm	DC Resistance	Max. 1.0 ohm
Rated Current	200 mA	Rated Current	200 mA
Common Mode Impedance	35ohm±25% @ 100MHz	Common Mode Impedance	70 ohm±20% @ 100MHz
Operating Temperature	-40 °C~ +85 °C	Operating Temperature	-40 °C~ +85 °C

### Impedance Vs. Frequency:



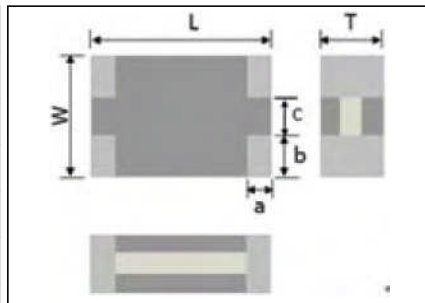
## High Frequency Devices-Common Mode Filter-RGCMF1210080V T

### How to Order

RG	CMF	121008	0	V		T
<b>Walsin</b> RF Device	<b>Product code</b> CMF: Common Mode Filter	<b>Dimension code</b> 121008= Length = 12 Width = 10 Thickness = 08 121009= Length = 12 Width = 10 Thickness = 09	<b>Unit of dimension</b> 0: 0.1 mm 1: 1.0 mm	<b>Application</b> V: High Speed Transmission Lines HDMI/ SATA (mini)LVDS PCI-E/ DVI Display Port	<b>Specification</b> Design Code	<b>Packing</b> T= Reeled

### Dimensions

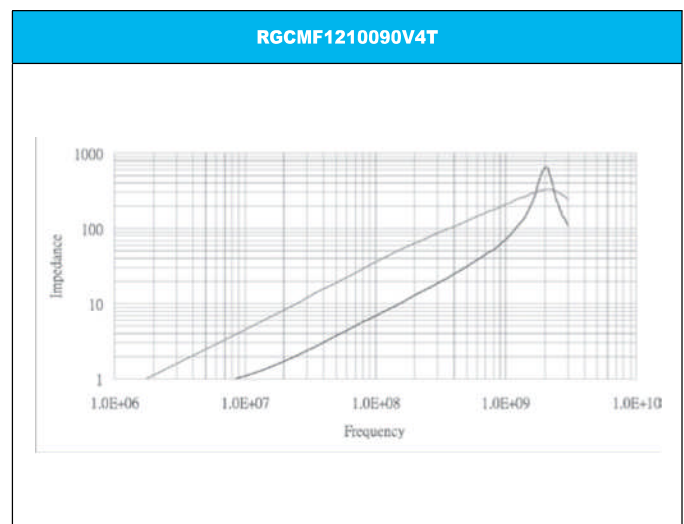
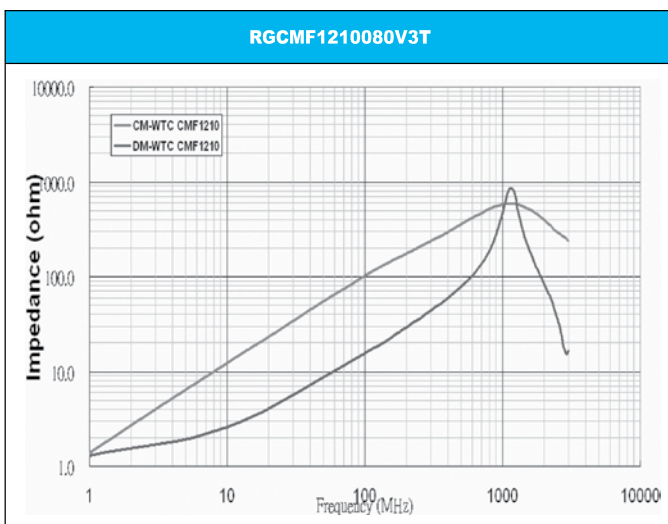
Symbol	RGCMF1210080V3T	RGCMF1210090V4T
L	1.25mm ± 0.10 mm	1.25mm ± 0.10 mm
W	1.02mm ± 0.10 mm	1.02mm ± 0.10 mm
T	0.80mm ± 0.10 mm	0.90mm ± 0.10 mm
a	0.25mm ± 0.10 mm	0.25mm ± 0.10 mm
b	0.37mm ± 0.10 mm	0.37mm ± 0.10 mm
c	0.28mm ± 0.10 mm	0.28mm ± 0.10 mm



### RGCMF1210080V T Series

Item	RGCMF1210080V3T	Item	RGCMF1210090V4T
Characteristic Impedance	100 ohm (Typical)	Characteristic Impedance	100 ohm (Typical)
DC Resistance	Max. 1.5 ohm	DC Resistance	Max. 1.5 ohm
Rated Current	200 mA	Rated Current	200 mA
Common Mode Attenuation	90ohm ± 20% @ 100MHz	Common Mode Attenuation	120 ohm±20% @ 100MHz
Operating Temperature	-40 °C~ +85 °C	Operating Temperature	-40 °C~ +85 °C

### Impedance Vs. Frequency:



## Multilayer Chip Varistor (MLV) - VZ Series & VH Series

### How to Order

VH	0402	M	050	C	G	T	330	-
<b>Type code</b>	<b>Chip Size</b>	<b>Style</b>	<b>Rated Voltage</b>	<b>Cap. Tolerance</b>	<b>Termination</b>	<b>Packing</b>	<b>Cap. code (pf)</b>	<b>Special Request</b>
V: Walsin ZnO Varistor H: High Speed and RF, and Special Capacitance Concern Z: General Purpose	0402, 0603 0805, 1206 Code is L x W (in inches) 0402 = 0.4 x 0.2 0603 = 0.6 x 0.3 0805 = 0.8 x 0.5 1206 = 1.2 x 0.6	M: Multilayer A: Array*	050: 5.5Vdc 090: 9.0Vdc 120: 12.0Vdc 140: 14.0Vdc 180: 18.0Vdc 300: 30.0Vdc	A: Typ. Capacitance for Z series C: Max. capacitance for H series	G : Green Material	T=Reeled B=Bulk	This item is only for H Series. Two significant digits followed by number of Zeros 3R0=3pF when C < 10pF 330=33x10 <sup>0</sup> =33pF 101=10x10 <sup>1</sup> =100pF 102=10x10 <sup>2</sup> =1000pF	

### Introduction - Plated & Lead-free Termination

High Speed ESD Voltage Suppressor is an advanced series of Walsin's Multilayer Chip Varistor (MLV). Nowadays, more and more communication devices become compact and apply denser and higher frequency circuits inside. Protection against the electronic static discharge (ESD) generated from human body transient voltage surge is more important when downsize of high-speed transistor makes its vulnerability to ESD and surge. Walsin's High Speed ESD Voltage Suppressor provides protection from ESD and EFT in high-speed data line and radio frequency (RF) circuits. Also, if capacitance of MLV is a concern to circuit designers, Walsin MLV H Series would supply a solution, MLV with specified capacitance and range. It is compatible with modern reflow and wave soldering procedures. We would give you a solution to transient over voltage and ESD protection to your products.

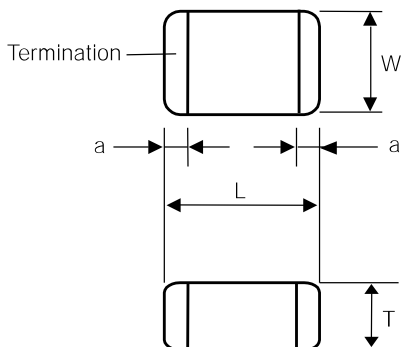
### Features

- Multilayer Fabrication Technology
- Small size (0402 & 0603)
- -55°C to 125°C Operating Temperature Range
- Operating Voltage Range  $V_M(DC)$  at 5.5V ~ 85V
- Able to withstand ESD test of IEC-61000-4-2
- Bi-directional Clamping characteristic
- Standard / Low / Customized Capacitance Types Available

### Applications

- Protection of Cellular Phones, PDA, High Speed Data Line...etc.
- ESD Protection for Components Sensitive to IEC 61000-4-2, Provides Circuit Board Transient Voltage Protection for Transistors.
- Protection of Video & Audio ports.

### Dimensions



Unit: mm

Size	0402	0603	0805	1206
L	1.00 ± 0.10	1.60 ± 0.15	2.00 ± 0.20	3.20 ± 0.20
W	0.50 ± 0.10	0.80 ± 0.15	1.25 ± 0.20	1.60 ± 0.20
T	0.50 ± 0.10	0.80 ± 0.15	0.80 ± 0.20	0.80 ± 0.10* 1.10 ± 0.20**
a	0.25 ± 0.15	0.35 ± 0.15	0.50 ± 0.20	0.65 ± 0.25

Note: \*Means VZ1206 5.5Vdc~22Vdc items

\*\*Means VZ1206 26Vdc~85Vdc items