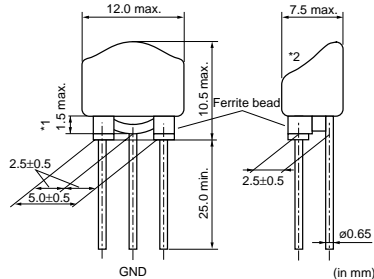


# EMIGUARD®(EMIFIL® with Varistor Function)

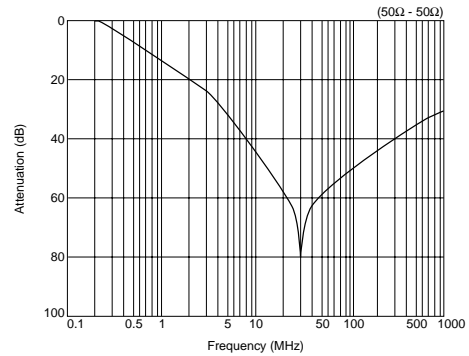
## VFS9V Series

### Dimension

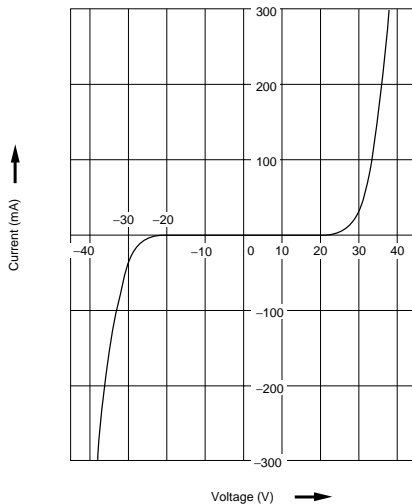


- \*1 Coating extending on leads does not exceed the tangent line.  
Exposed electrode, if any, is covered by solder, etc.
- \*2 There should not be the exposure of the ferrite bead if a hole is in top of filter, the ferrite bead should not be exposed.

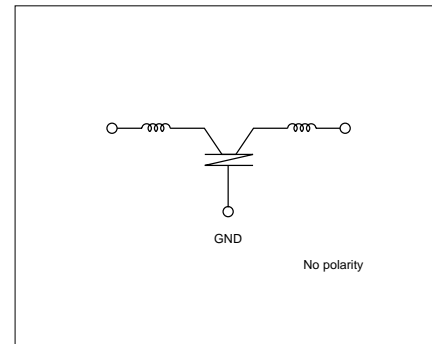
### Insertion Loss Characteristics



### Voltage-Current Characteristics



### Equivalent Circuit



### Rated Value (□: lead type/package code)

Part Number	Rated Voltage	Varistor Voltage	Capacitance	Rated Current	Operating Temperature Range
VFS9VD31B223□	12Vdc	22Vdc +20%-20%	22000pF +50%-20%	7A	-40°C to 100°C

Rated current is 7A for bulk type and 6A for taping type.


Rated current taping type is 6A because diameter of lead is 0.6mm and its lead layout is in-line type.

Continued on the following page.

● This data sheet is applied for EMIGUARD® (EMIFIL® with Varistor Function) used for General Electronics equipment for your design.

#### Note:

- This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

 Continued from the preceding page.

## ■ Packaging

### ● Minimum Quantity

Part Number	Minimum Order Quantity (order in sets only) (Pcs.)		
	Ammo Pack	ø320mm Paper reel	Bulk (Bag)
<b>VFS9V Series</b>	—	800	200

### ● Lead Type/Packaging

Code	Lead Type	Lead Length*	Packaging	Series
<b>T51B</b>	Incrimp	25.0mm min.	Bulk	<b>VFR3/VFS6</b>
<b>U31A</b>		18.5+/-1.0mm	Ammo Pack	
<b>Q55B</b>	Straight	25.0mm min.	Bulk	<b>VFS9</b>
<b>Q91J</b>		20.0+/-1.0mm	Paper Reel (ø320mm)	
<b>Q92J</b>		16.5+/-1.0mm		
<b>Q93J</b>		18.5+/-1.0mm		

\*Lead Distance between Reference and Bottom Planes except Bulk.

## ■ ⚠ Caution (Rating)

Do not use products beyond the rated current and rated voltage as this may create excessive heat and deteriorate the insulation resistance.

● This data sheet is applied for EMIGUARD® (EMIFIL® with Varistor Function) used for General Electronics equipment for your design.

### ⚠ Note:

1. This datasheet is downloaded from the website of Murata Manufacturing co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.