

### Features

1. Effective for suppressing noise in high speed digital signal line.
2. Terminal electrode has excellent solder heat resistance for soldering.
3. Lead Free (RoHS Compliance).

### Applications

1. High resolution video signal lines.
2. EMI countermeasure for clock signal lines.
3. RF module of telecommunication products.

### Ordering Information

SEF - 2012 - 220 - J T  
 (1) (2) (3) (4) (5)

#### (1) Series

SEF : Chip EMI filter

#### (4) Termination

J : Nickel barrier

#### (2) Dimensions

First two digits : length(mm)  
 Last two digits : width(mm)

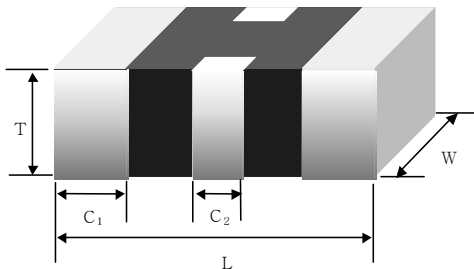
#### (5) Packaging

B : Bulk package  
 T : Tape & Reel (Φ178mm [ 7 inches ])  
 L : Tape & Reel (Φ254mm [ 10 inches ])

#### (3) Normal capacitance

First two digits are capacitance value.  
 Last digit is the number of zeros following.

### Shape and Dimensions



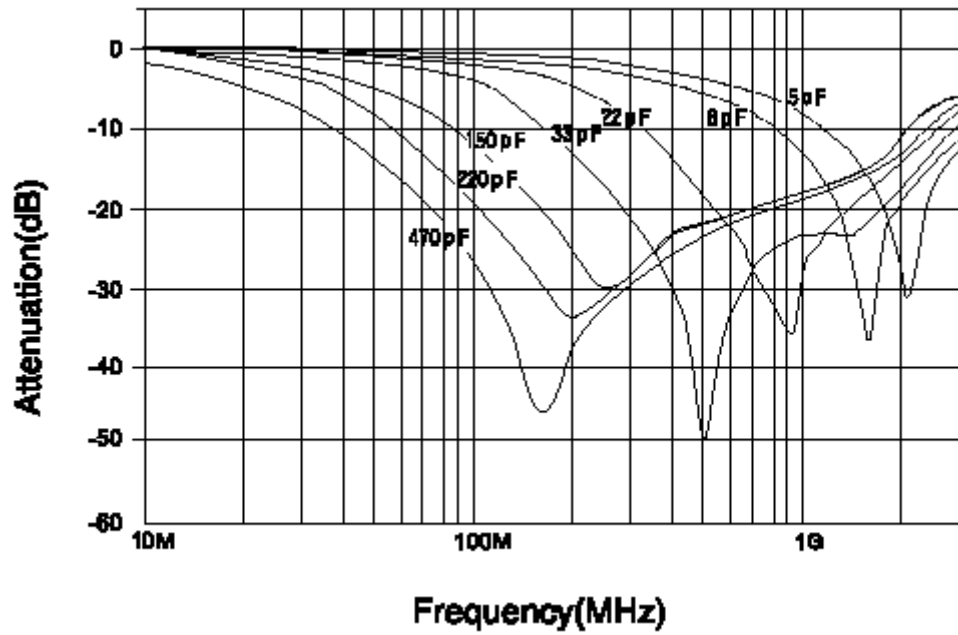
unit : mm(inches)

| Type      | L                      | W                       | T                      | C1                     | C2                     |
|-----------|------------------------|-------------------------|------------------------|------------------------|------------------------|
| SEF-2012- | 2.0±0.2<br>[.079±.008] | 1.25±0.2<br>[.049±.008] | 0.8±0.2<br>[.031±.008] | 0.3±0.2<br>[.012±.008] | 0.4±0.2<br>[.016±.008] |

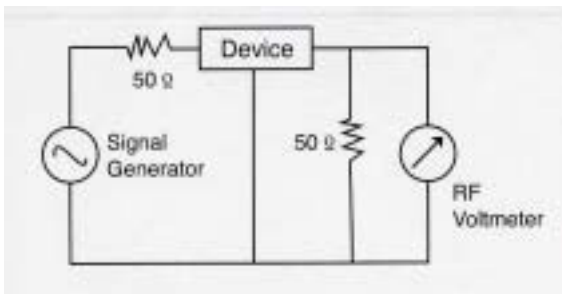
### Electrical Parameters

| Part No.       | Capacitance     | Cut-off Frequency | DC Resistance | Rated Current | Rated Voltage |
|----------------|-----------------|-------------------|---------------|---------------|---------------|
| SEF-2012-050□□ | 5pF(+50/-20)%   | 600MHz            | 200 mΩ Max.   | 300 mA max.   | 10 Vdc max.   |
| SEF-2012-080□□ | 8pF(+50/-20)%   | 350MHz            |               |               |               |
| SEF-2012-220□□ | 22pF(+50/-20)%  | 150MHz            |               |               |               |
| SEF-2012-330□□ | 33pF(+50/-20)%  | 100MHz            |               |               |               |
| SEF-2012-151□□ | 150pF(+50/-20)% | 40MHz             |               |               |               |
| SEF-2012-221□□ | 220pF(+50/-20)% | 25MHz             |               |               |               |
| SEF-2012-471□□ | 470pF(+50/-20)% | 15MHz             |               |               |               |

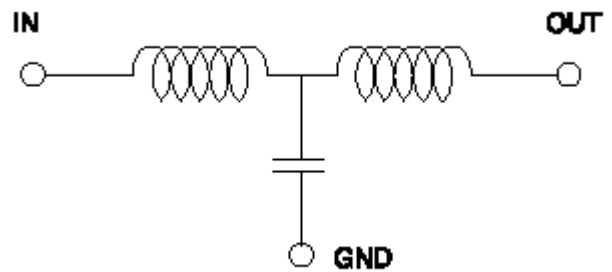
Electrical Characteristic Curves



Attenuation Measuring Circuit



Equivalent circuit



\*All specifications are subject to change without notice.