

# EMI/EMC FILTER

## RES1 SERIES



### FEATURES

- Suitable for the products that must conform to FCC, FTZ.
- Remarkable attenuation for high voltage impulse.
- Good shield effect by using metal case.
- Excellent filtering characteristics for both differential mode and common mode.
- Epoxy molded for reliability.
- Bidirectional structure effective for both noise from externally and internally generated.

### APPLICATIONS

- Digital equipments.
- Mini computers and peripherals.
- Measuring instruments, medical instruments.
- For equipment requiring very high impulse attenuation.
- Suitable for FA equipments.
- Industrial equipments like UPS, inverters, Converters.
- Communication equipments.
- OA equipments like copy machine, FAX, etc..

## SPECIFICATIONS

| Model           | Rated Voltage (AC,DC) | Rated Current | Temperature Rise | Operating Temperature                                       |
|-----------------|-----------------------|---------------|------------------|-------------------------------------------------------------|
| RES1-F05, T05   | 250V                  | 5A            | 45°C max.        | -25°C to + 85°C<br>Including<br>temperature rise<br>※ Fig.1 |
| RES1-F08, T08   | 250V                  | 8A            | 45°C max.        |                                                             |
| RES1-F10, T10   | 250V                  | 10A           | 45°C max.        |                                                             |
| RES1-F15, T15   | 250V                  | 15A           | 45°C max.        |                                                             |
| RES1-F20-B, T20 | 250V                  | 20A           | 45°C max.        |                                                             |
| RES1-T30        | 250V                  | 30A           | 40°C max.        |                                                             |

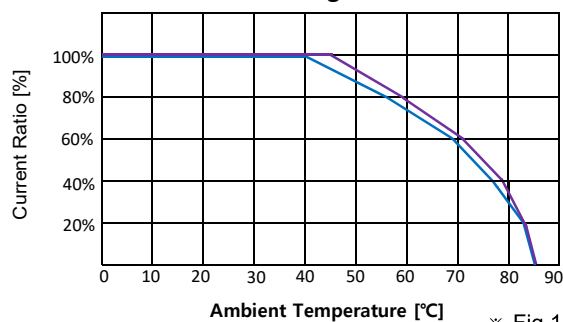
- Many variations in X and Y capacitor value are available with approvals. For the details, consult with local agent.

Note : Test Voltage : 1500V AC one minute, line to earth.  
Insulation Resistance : 300 Mohm min. at 500V DC.  
Leakage Current : 0.5mA max.  
Voltage Drop : 1V max. at rated current.  
Discharge Time : 0.4sec max.  
Weight : 250g for ES1-Series except 720g for ES1-T30.

#### Model Number Construction

| RES1               | T                                                                                          | 05                                                                                                 | B                                                                    |
|--------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| Series Description | Input/Output Terminal style<br>F : Faston Tab #250<br>T : M4 Stud<br>M5 Stud(ES1-T30 Only) | Current Rating: AC rms<br>05: 5 amp, 08: 8 amp<br>10: 10 amp, 15: 15 amp<br>20: 20 amp, 30: 30 amp | Input/Output Terminal style<br>B : Faston Tab #250<br>(ES1-F20 Only) |

Derating Curve

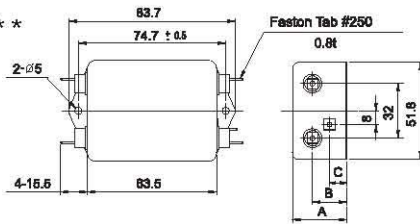


※ Fig.1

— RES1-(T/F)05, RES1-(T/F)08, RES1-(T/F)10,  
RES1-(T/F)15, RES1-(T/F)20, RES1-T20B  
— RES1-(T/F)30, RES1-T30A

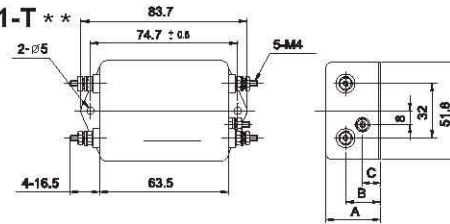
## Shapes and Dimensions

RES1-F \*\*

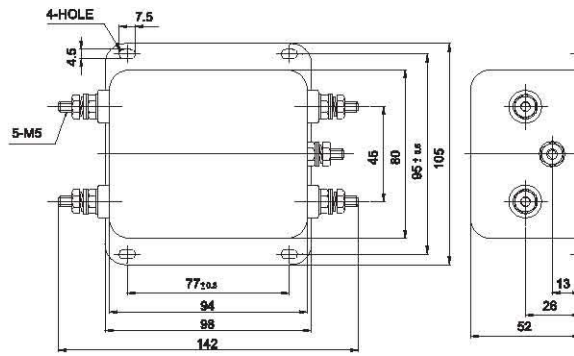


| MODEL          | A  | B  | C  |
|----------------|----|----|----|
| ES1-10, 15, 20 | 38 | 24 | 11 |
| ES1-05, 08     | 32 | 20 | 8  |

RES1-T \*\*

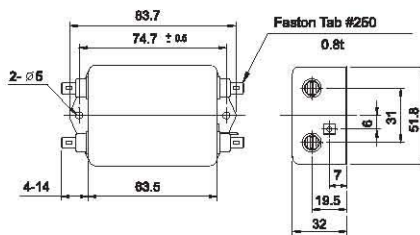


RES1-T30



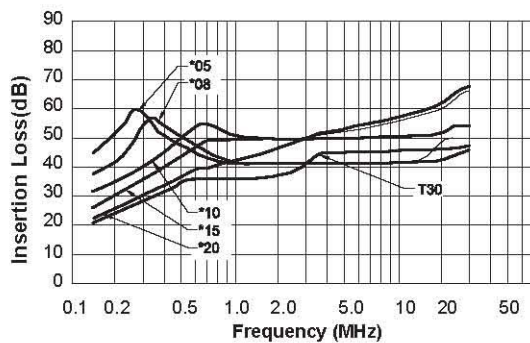
\* General tolerance : ±1.0  
\* Unit : mm  
\* Metal Case

RES1-F20-B

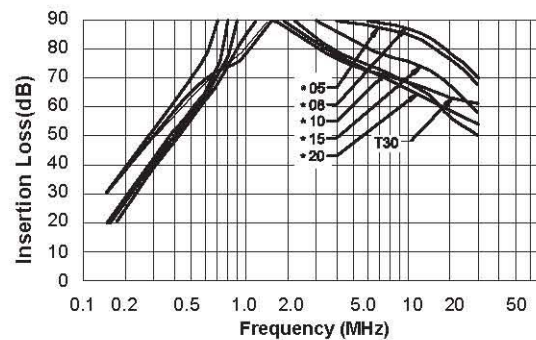


## Attenuation Characteristics

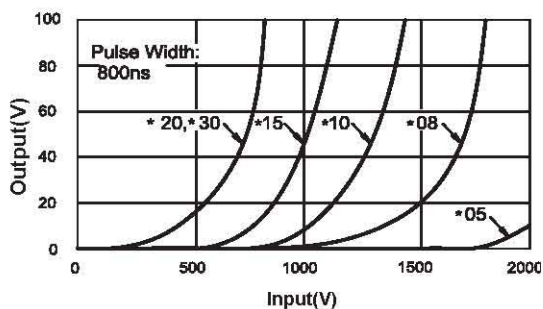
### Common Mode (RES1-(10,15,20,T30)types)



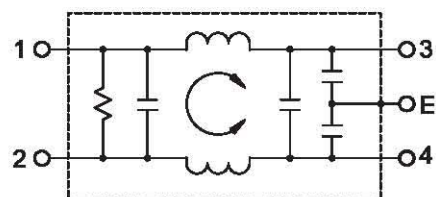
### Differential Mode (RES1-(10,15,20,T30)types)



### Impulse Characteristics



### Circuit Diagram



### Measurement configuration

