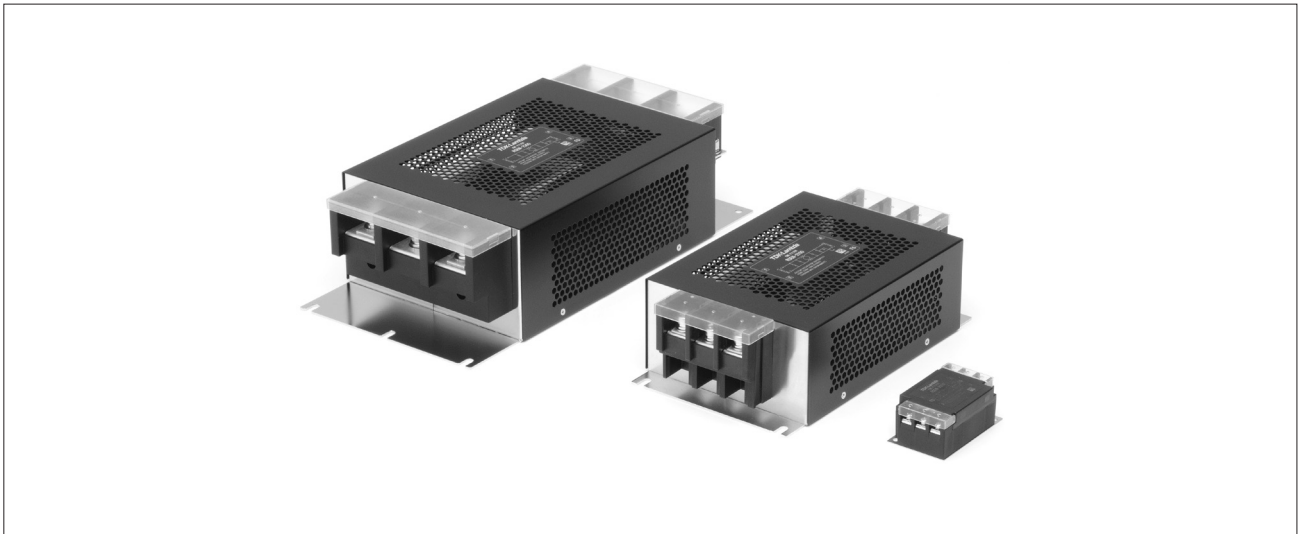


# RSEN SERIES

## Multipurpose Single-Phase Filter with Various Variations and Functions



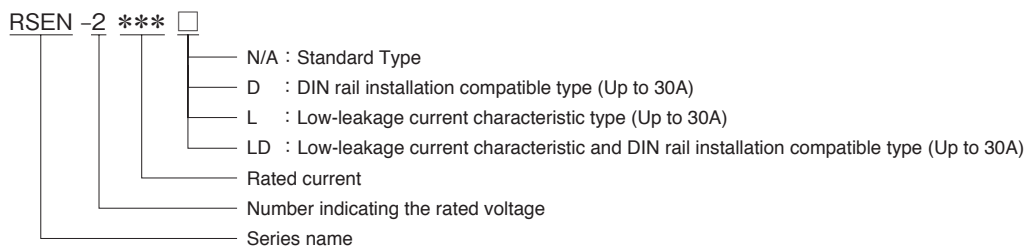
### FEATURES

- Self-tightening screws and an open/close type cover make wiring work easier.
- 3 to 300A wide range lineup.
- Optional low-leakage current characteristic type and DIN rail installation compatible type are also available.

### SAFETY STANDARDS

|                       |   |
|-----------------------|---|
| UL1283                | UL File No. E62388 (Up to 60A)          |
| CSA C22.2 No.8        | CSA File No. LR76849 (Up to 60A)        |
| EN60939-1/-2 (ENEC14) | Licence Ref. No. SE/07115-2 (Up to 60A) |

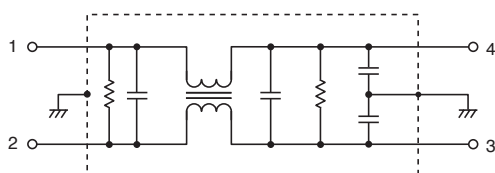
### PRODUCT IDENTIFICATION



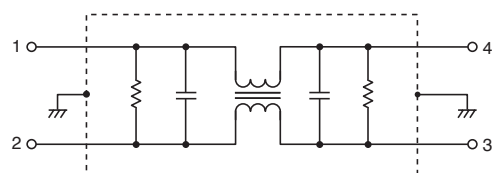
### CONFORMITY TO RoHS Directive

### CIRCUIT DIAGRAMS

RSEN-2 \*\*\*  
RSEN-2 \*\*\* D



RSEN-2 \*\*\* L



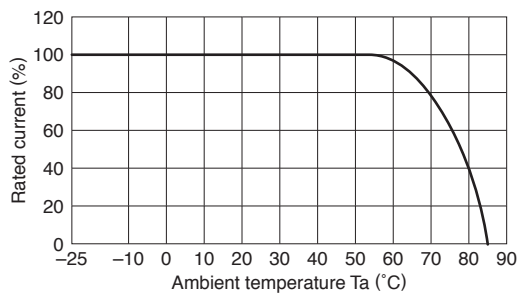
**ELECTRICAL CHARACTERISTICS**

| Part No.  | Rated voltage (AC/DC) | Rated current (AC/DC) | Withstand voltage                           | Insulation resistance               | Leakage current              | Operating temperature range | With derating over | DC resistance (mΩ) | Attenuation frequency range (MHz) |           |                   | Weight (kg) |
|-----------|-----------------------|-----------------------|---|-------------------------------------|------------------------------|-----------------------------|--------------------|--------------------|-----------------------------------|-----------|-------------------|-------------|
|           |                       |                       |   |                                     |                              |                             |                    |                    | Common mode                       |           | Differential mode |             |
|           |                       |                       |   |                                     |                              |                             |                    |                    | at 25dB                           | at 10dB   | at 25dB           |             |
| RSEN-2003 | 250V                  | 3A                    | AC.2500V<br>60s<br>[Between line to ground] | 100MΩ<br>min.<br>[DC.500V/<br>1min] | 1.0mA<br>max.<br>[250V/60Hz] | -25 to +85°C                | 55°C               | 250 max.           | 0.1 to 20                         | -         | 0.2 to 30         | 0.17        |
| RSEN-2006 |                       | 6A                    |   |                                     |                              |                             |                    | 110 max.           | 0.1 to 10                         | -         | 0.2 to 30         | 0.23        |
| RSEN-2010 |                       | 10A                   |   |                                     |                              |                             |                    | 40 max.            | 0.2 to 20                         | -         | 0.2 to 30         | 0.23        |
| RSEN-2016 |                       | 16A                   |   |                                     |                              |                             |                    | 20 max.            | 0.3 to 20                         | -         | 0.3 to 30         | 0.23        |
| RSEN-2020 |                       | 20A                   |   |                                     |                              |                             |                    | 10 max.            | 0.4 to 30                         | -         | 0.3 to 30         | 0.23        |
| RSEN-2030 |                       | 30A                   |   |                                     |                              |                             |                    | 6 max.             | 2 to 30                           | -         | 0.4 to 30         | 0.23        |
| RSEN-2040 |                       | 40A                   |   |                                     |                              |                             |                    | 6 max.             | 2 to 10                           | -         | 0.2 to 30         | 0.87        |
| RSEN-2050 |                       | 50A                   |   |                                     |                              |                             |                    | 4 max.             | 2 to 10                           | -         | 0.2 to 30         | 0.87        |
| RSEN-2060 |                       | 60A                   |   |                                     |                              |                             |                    | 3 max.             | 2 to 10                           | -         | 0.2 to 30         | 0.87        |
| RSEN-2080 |                       | 80A                   |   |                                     |                              |                             |                    | 3.4 max.           | 2 to 10                           | -         | 0.1 to 30         | 3.60        |
| RSEN-2100 |                       | 100A                  |   |                                     |                              |                             |                    | 2.7 max.           | 2 to 10                           | -         | 0.1 to 30         | 3.80        |
| RSEN-2150 |                       | 150A                  |   |                                     |                              |                             |                    | 2 max.             | 2 to 10                           | -         | 0.1 to 30         | 5.80        |
| RSEN-2200 |                       | 200A                  |   |                                     |                              |                             |                    | 1.4 max.           | -                                 | 0.4 to 30 | 0.1 to 30         | 8.40        |
| RSEN-2250 |                       | 250A                  |   |                                     |                              |                             |                    | 1 max.             | -                                 | 1 to 20   | 0.1 to 30         | 8.10        |
| RSEN-2300 | 300A                  | 0.7 max.              | -   | 2 to 20                             | 0.1 to 30                    | 7.80                        |                    |                    |                                   |           |                   |             |

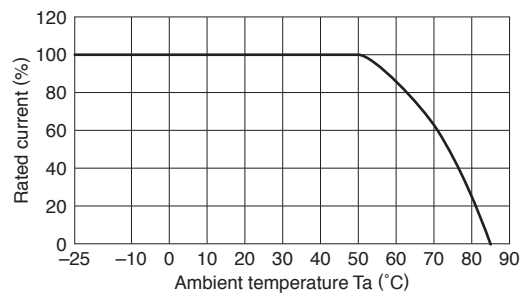
| Part No.   | Rated voltage (AC/DC) | Rated current (AC/DC) | Withstand voltage                           | Insulation resistance               | Leakage current              | Operating temperature range | With derating over | DC resistance (mΩ) | Attenuation frequency range (MHz) |           |                   | Weight (kg) |
|------------|-----------------------|-----------------------|---|-------------------------------------|------------------------------|-----------------------------|--------------------|--------------------|-----------------------------------|-----------|-------------------|-------------|
|            |                       |                       |   |                                     |                              |                             |                    |                    | Common mode                       |           | Differential mode |             |
|            |                       |                       |   |                                     |                              |                             |                    |                    | at 25dB                           | at 10dB   | at 25dB           |             |
| RSEN-2003L | 250V                  | 3A                    | AC.2500V<br>60s<br>[Between line to ground] | 100MΩ<br>min.<br>[DC.500V/<br>1min] | 10 μA<br>max.<br>[250V/60Hz] | -25 to +85°C                | 55°C               | 250 max.           | 0.1 to 2                          | -         | 0.2 to 30         | 0.17        |
| RSEN-2006L |                       | 6A                    |   |                                     |                              |                             |                    | 110 max.           | 0.1 to 2                          | -         | 0.2 to 30         | 0.22        |
| RSEN-2010L |                       | 10A                   |   |                                     |                              |                             |                    | 40 max.            | -                                 | 0.1 to 10 | 0.2 to 30         | 0.23        |
| RSEN-2016L |                       | 16A                   |   |                                     |                              |                             |                    | 20 max.            | -                                 | 0.1 to 10 | 0.2 to 30         | 0.23        |
| RSEN-2020L |                       | 20A                   |   |                                     |                              |                             |                    | 10 max.            | -                                 | 0.2 to 10 | 0.3 to 30         | 0.23        |
| RSEN-2030L |                       | 30A                   |   |                                     |                              |                             |                    | 6 max.             | -                                 | 0.3 to 5  | 0.3 to 30         | 0.23        |

**DERATING GRAPHS**

RSEN-2003/2006/2010/2016/2020/2030/  
2040/2050/2060

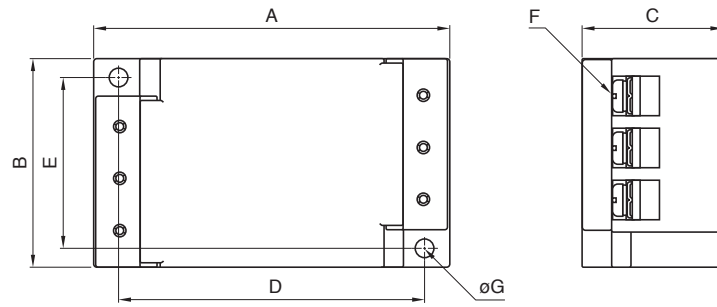


RSEN-2080/2100/2150/2200/2250/2300

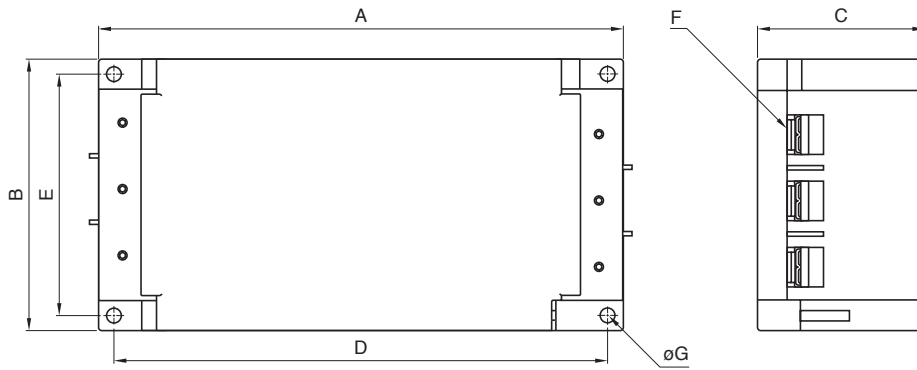


MECHANICAL

RSEN-2003/2006/2010/2016/2020/2030



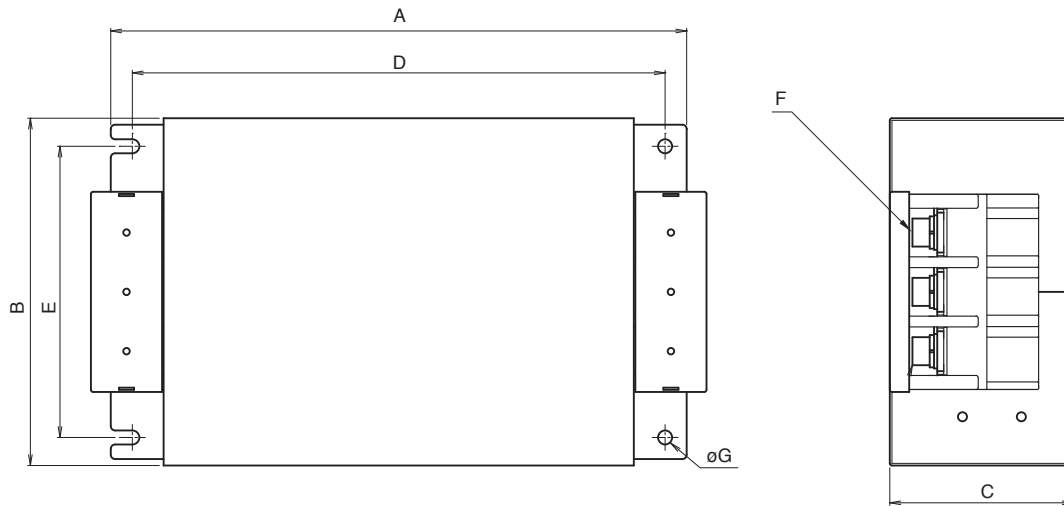
RSEN-2040/2050/2060



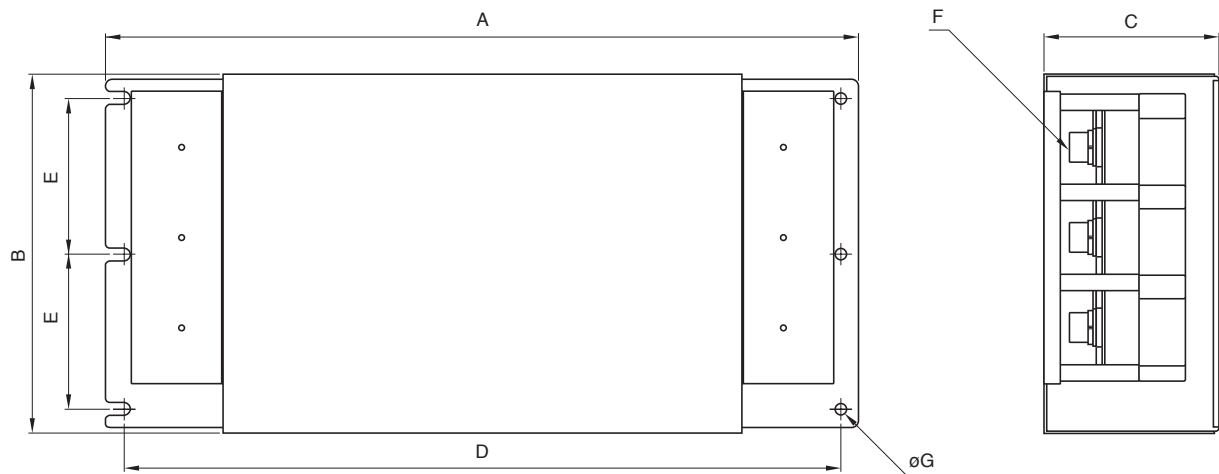
Dimensions in mm

| Part No.  | A   | B  | C  | D   | E  | F  | $\phi$ G | Recommended clamping torque |
|-----------|-----|----|----|-----|----|----|----------|-----------------------------|
| RSEN-2003 | 87  | 52 | 35 | 75  | 43 | M4 | 4.5      | 1.27N · m                   |
| RSEN-2006 |     |    |    |     |    |    |          |                             |
| RSEN-2010 |     |    |    |     |    |    |          |                             |
| RSEN-2016 |     |    |    |     |    |    |          |                             |
| RSEN-2020 |     |    |    |     |    |    |          |                             |
| RSEN-2030 | 170 | 90 | 54 | 160 | 80 | M5 | 4.5      | 2.5N · m                    |
| RSEN-2040 |     |    |    |     |    |    |          |                             |
| RSEN-2050 |     |    |    |     |    |    |          |                             |
| RSEN-2060 |     |    |    |     |    |    |          |                             |

RSEN-2080/2100/2150



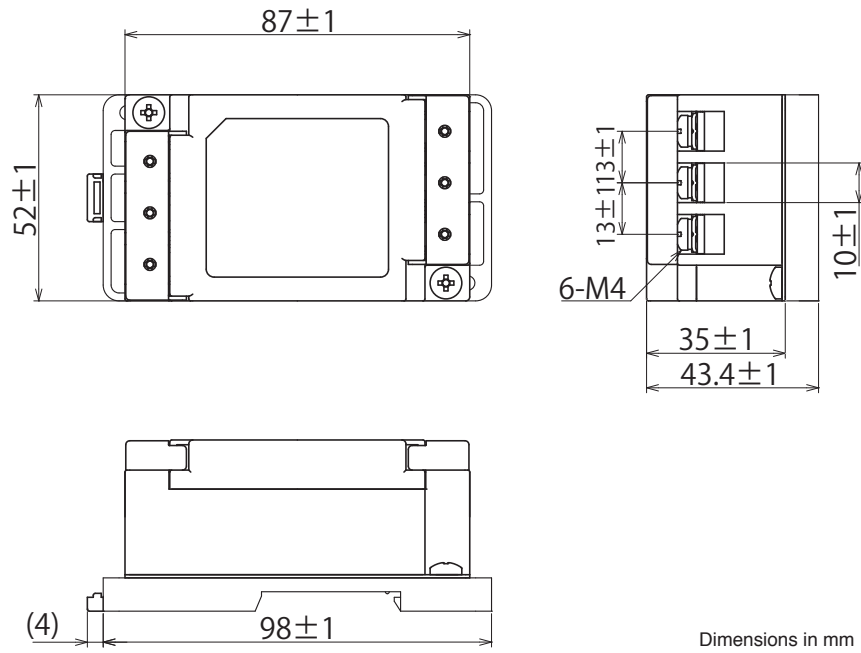
RSEN-2200/2250/2300



Dimensions in mm

| Part No.  | A   | B   | C   | D   | E    | F   | $\phi G$ | Recommended clamping torque |
|-----------|-----|-----|-----|-----|------|-----|----------|-----------------------------|
| RSEN-2080 | 267 | 161 | 85  | 247 | 135  | M8  | 6.5      | 7.64N · m                   |
| RSEN-2100 |     |     |     |     |      |     |          |                             |
| RSEN-2150 |     |     |     |     |      |     |          |                             |
| RSEN-2200 | 390 | 195 | 103 | 370 | 84.5 | M10 | 6.5      | 11.8N · m                   |
| RSEN-2250 |     |     |     |     |      |     |          |                             |
| RSEN-2300 |     |     |     |     |      |     |          |                             |

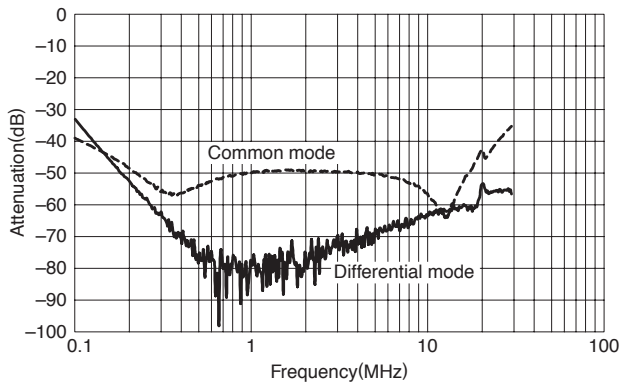
RSEN-2003D/2006D/2010D/2016D/2020D/2030D



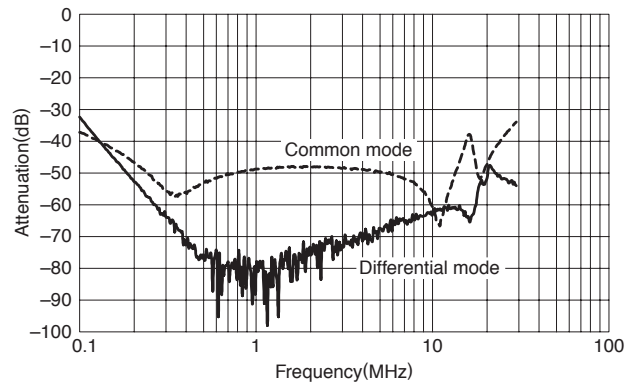
Dimensions in mm

■ ATTENUATION vs. FREQUENCY CHARACTERISTICS

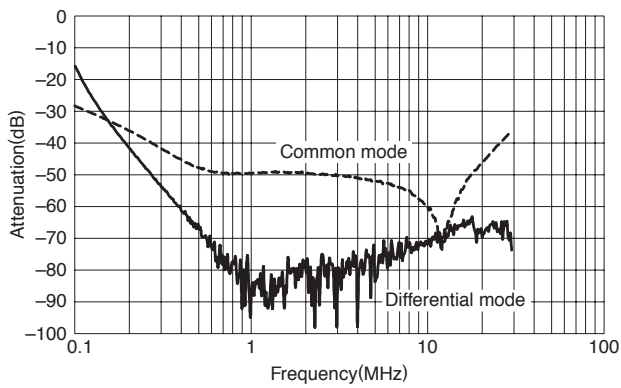
RSEN-2003



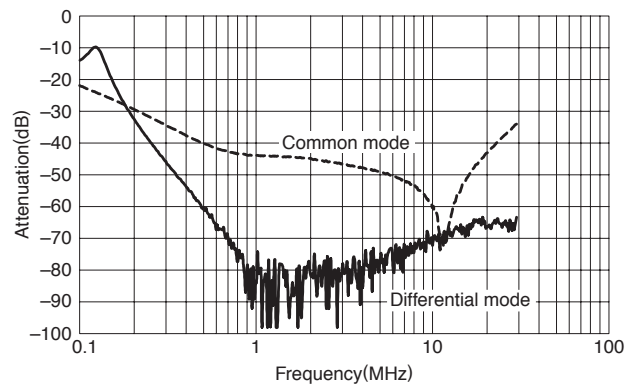
RSEN-2006



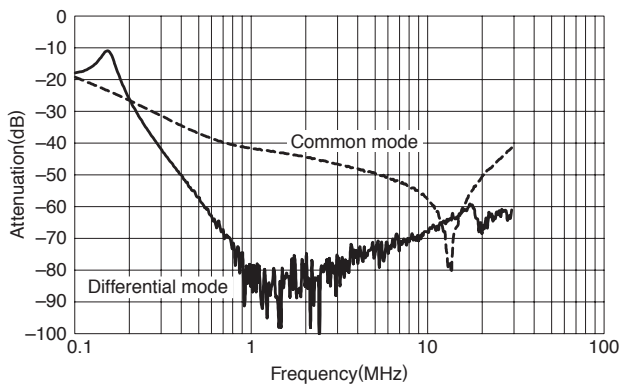
RSEN-2010



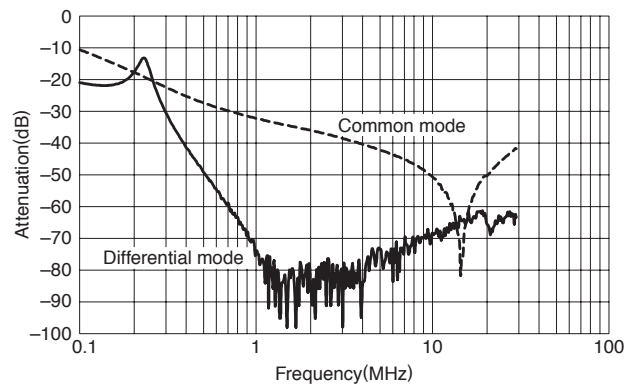
RSEN-2016



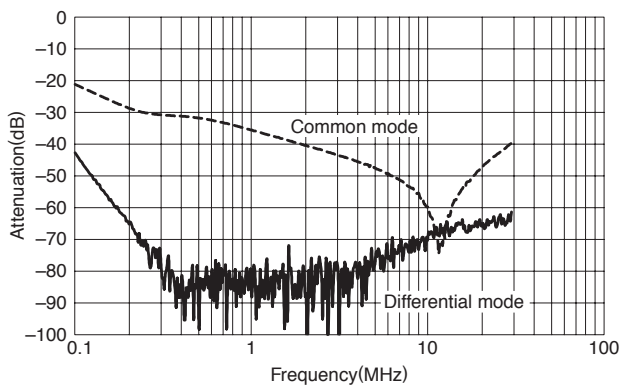
RSEN-2020



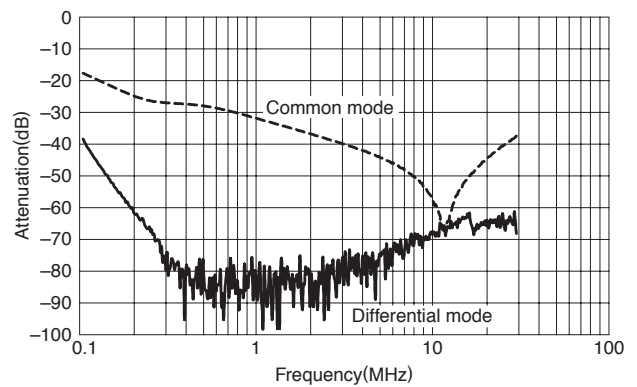
RSEN-2030



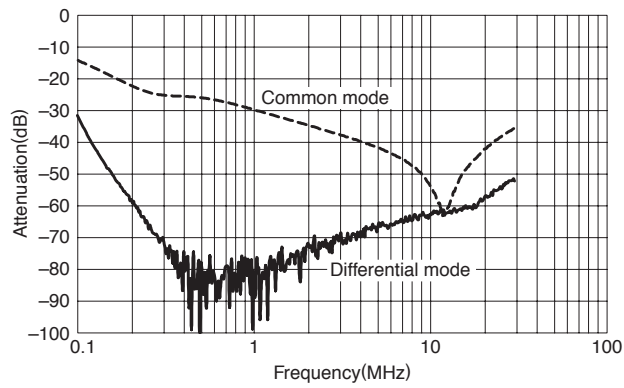
RSEN-2040



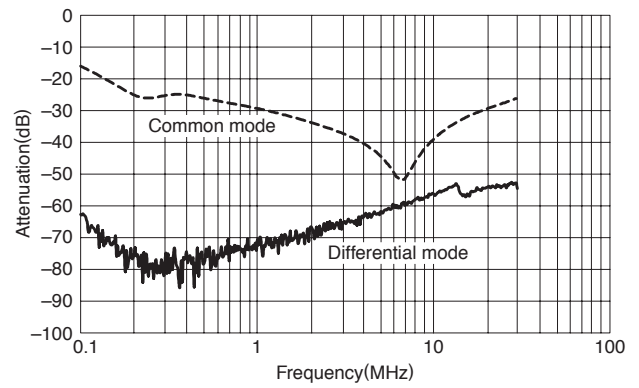
RSEN-2050



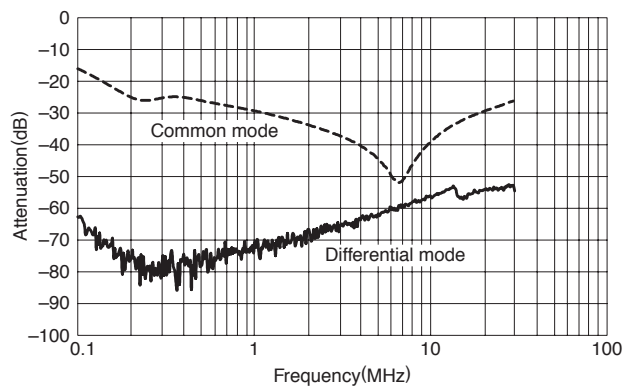
RSEN-2060



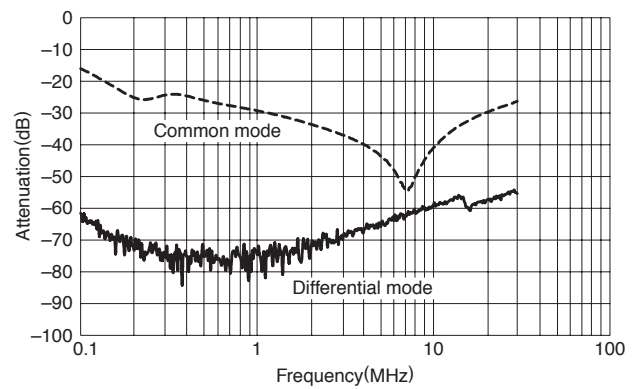
RSEN-2080



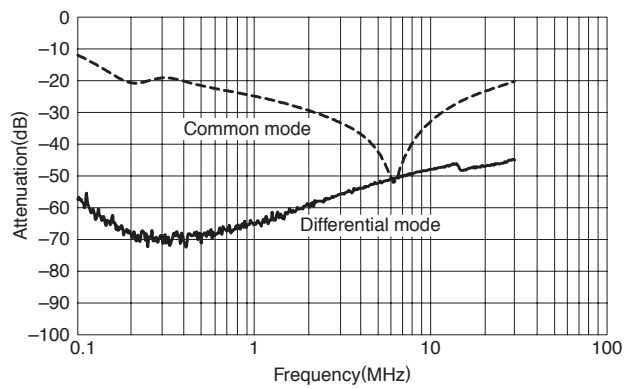
RSEN-2100



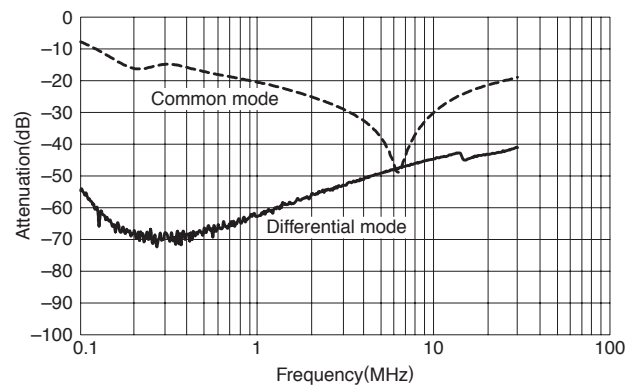
RSEN-2150



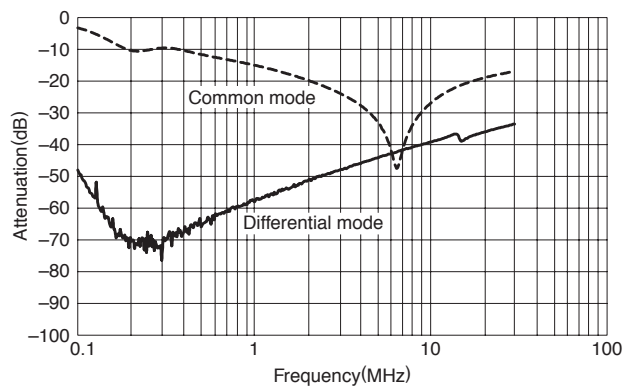
RSEN-2200



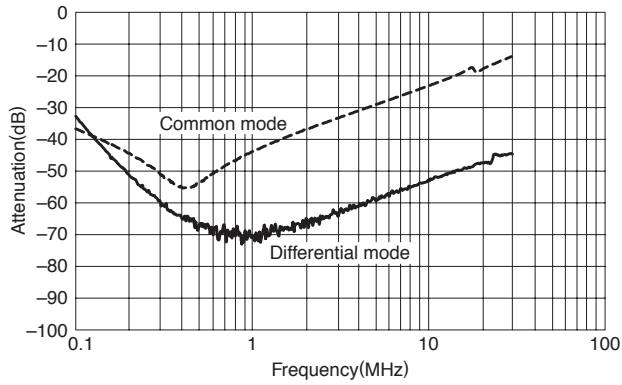
RSEN-2250



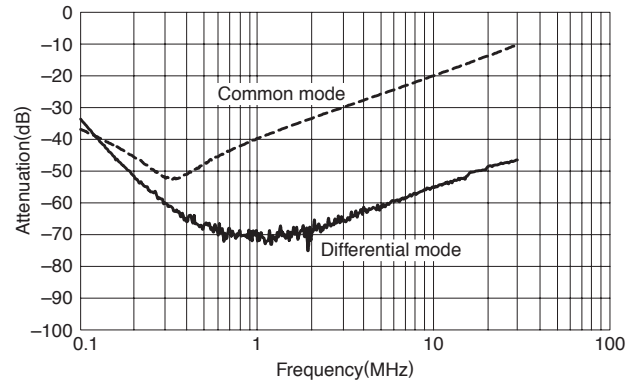
RSEN-2300



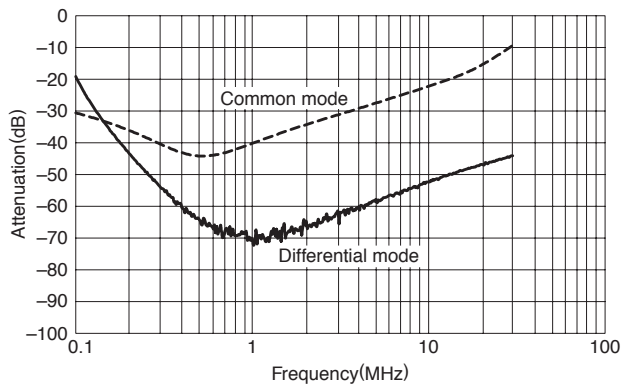
RSEN-2003L



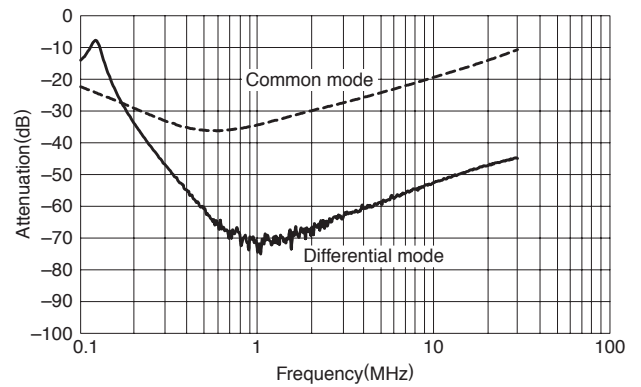
RSEN-2006L



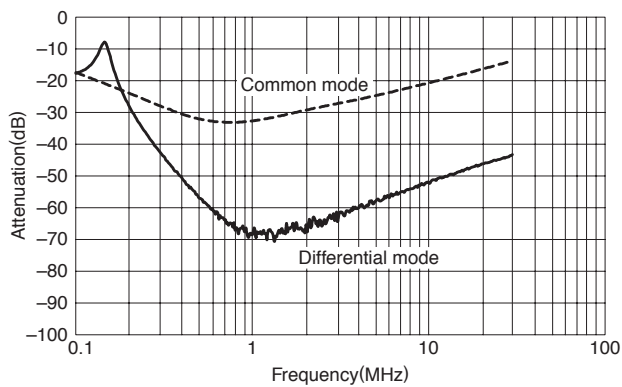
RSEN-2010L



RSEN-2016L



RSEN-2020L



RSEN-2030L

