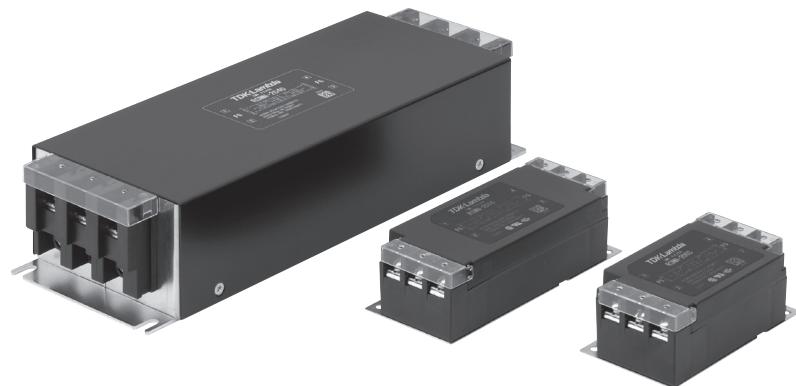


## RSMN SERIES

Compact Multipurpose Type Compatible with High-Voltage Pulse



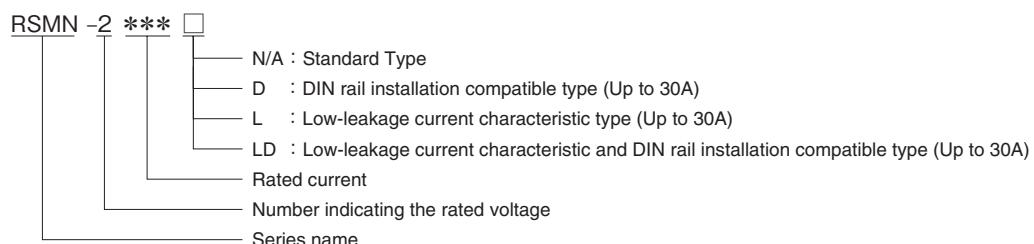
### ■ FEATURES

- EMC filter equipped with an amorphous core as the common mode coil core for the RSHN series, which helps prevent device errors, and can also withstand current saturation.
- Self-tightening screws and an open/close type cover make wiring work easier.
- Optional low-leakage characteristic type and DIN rail installation compatible type are also available.
- Compliant with RoHS directives.

### ■ SAFETY STANDARDS

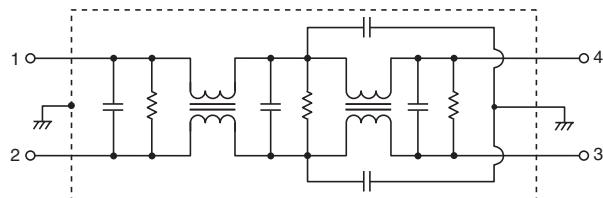
|                |   |
|----------------|---|
| UL1283         | File No. E62388 (Up to 30A)             |
| CSA C22.2 No.8 | File No. 208777 (Up to 30A)             |
| EN60939        | Licence Ref. No. SE/07115-3 (Up to 30A) |

### ■ PRODUCT IDENTIFICATION

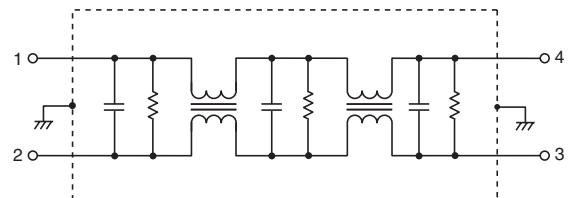


### ■ CIRCUIT DIAGRAM

RSMN-2 \*\*\*  
RSMN-2 \*\*\*D



RSMN-2 \*\*\*L  
RSMN-2 \*\*\*LD



• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

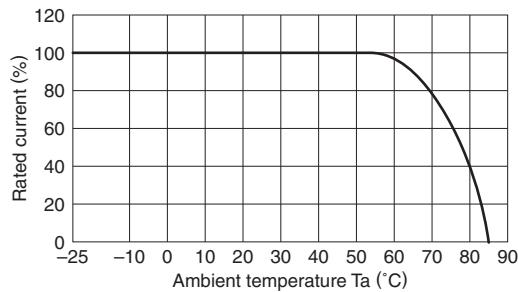
• All specifications are subject to change without notice.

## ■ 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 (g) |
|-----------|-----------------------|-----------------------|---|-------------------------------------|------------------------------|-----------------------------|--------------------|--------------------|-----------------------------------|-------------------|------------|
|           |                       |                       |   |                                     |                              |                             |                    |                    | Common mode                       | Differential mode |            |
|           |                       |                       |   |                                     |                              |                             |                    |                    | at 25dB                           | at 25dB           |            |
| RSMN-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               | 350 max.           | 0.1 to 30                         | 0.1 to 30         | 190        |
| RSMN-2006 |                       | 6A                    |   |                                     |                              |                             |                    | 140 max.           | 0.1 to 30                         | 0.2 to 30         | 240        |
| RSMN-2010 |                       | 10A                   |   |                                     |                              |                             |                    | 60 max.            | 0.2 to 30                         | 0.2 to 30         | 240        |
| RSMN-2016 |                       | 16A                   |   |                                     |                              |                             |                    | 35 max.            | 0.2 to 30                         | 0.3 to 30         | 350        |
| RSMN-2020 |                       | 20A                   |   |                                     |                              |                             |                    | 22 max.            | 0.3 to 20                         | 0.4 to 30         | 350        |
| RSMN-2030 |                       | 30A                   |   |                                     |                              |                             |                    | 12 max.            | 0.4 to 20                         | 0.6 to 30         | 350        |
| RSMN-2040 |                       | 40A                   |   |                                     |                              |                             |                    | 10 max.            | 0.3 to 30                         | 0.1 to 30         | 960        |
| RSMN-2050 |                       | 50A                   |   |                                     |                              |                             |                    | 8 max.             | 0.4 to 30                         | 0.3 to 30         | 960        |
| RSMN-2060 |                       | 60A                   |   |                                     |                              |                             |                    | 6 max.             | 0.5 to 30                         | 0.3 to 30         | 960        |

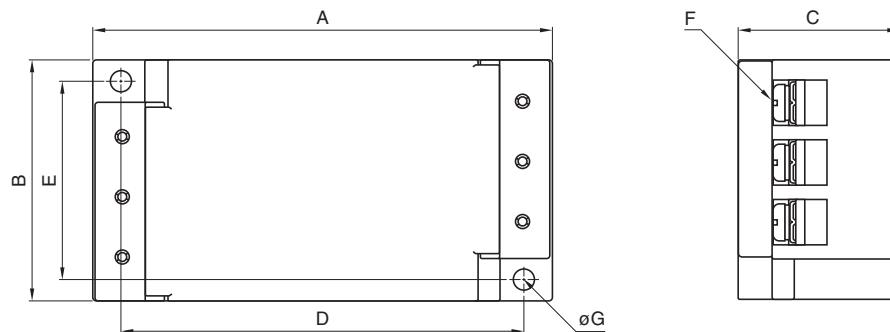
| Part No.   | Rated voltage (AC/DC) | Rated current (AC/DC) | Withstand voltage                           | Insulation resistance               | Leakage current               | Operating temperature range | With derating over | DC resistance (mΩ) | Attenuation frequency range (MHz) |                   | Weight (g) |     |
|------------|-----------------------|-----------------------|---|-------------------------------------|-------------------------------|-----------------------------|--------------------|--------------------|-----------------------------------|-------------------|------------|-----|
|            |                       |                       |   |                                     |                               |                             |                    |                    | Common mode                       | Differential mode |            |     |
|            |                       |                       |   |                                     |                               |                             |                    |                    | at 25dB                           | at 10dB           |            |     |
| RSMN-2003L | 250V                  | 3A                    | AC.2500V<br>60s<br>[Between line to ground] | 100MΩ<br>min.<br>[DC.500V/<br>1min] | 100 μA<br>max.<br>[250V/60Hz] | -25 to +85°C                | 55°C               | 350 max.           | 0.3 to 30                         | -                 | 0.2 to 30  | 190 |
| RSMN-2006L |                       | 6A                    |   |                                     |                               |                             |                    | 140 max.           | 0.4 to 20                         | -                 | 0.2 to 30  | 240 |
| RSMN-2010L |                       | 10A                   |   |                                     |                               |                             |                    | 60 max.            | 0.7 to 20                         | -                 | 0.3 to 30  | 240 |
| RSMN-2016L |                       | 16A                   |   |                                     |                               |                             |                    | 35 max.            | 0.7 to 20                         | -                 | 0.3 to 30  | 350 |
| RSMN-2020L |                       | 20A                   |   |                                     |                               |                             |                    | 22 max.            | -                                 | 0.6 to 20         | 0.3 to 30  | 350 |
| RSMN-2030L |                       | 30A                   |   |                                     |                               |                             |                    | 12 max.            | -                                 | 1 to 20           | 0.4 to 30  | 350 |

## ■ DERATINGS

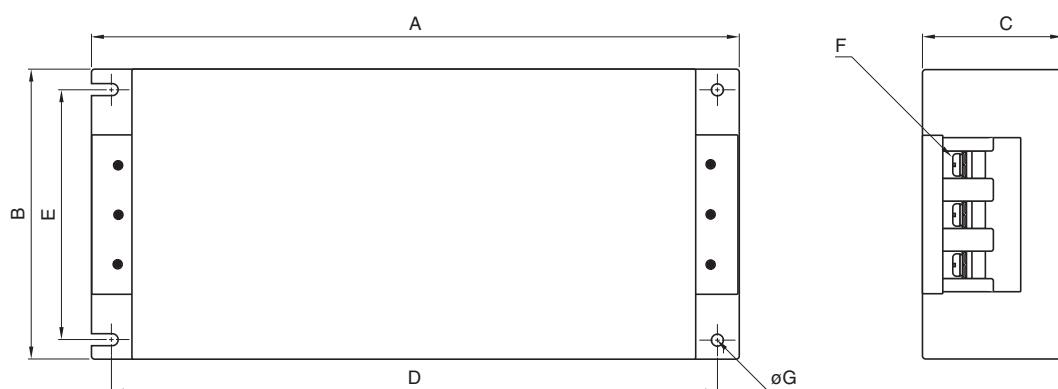


## ■ SHAPES AND DIMENSIONS

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

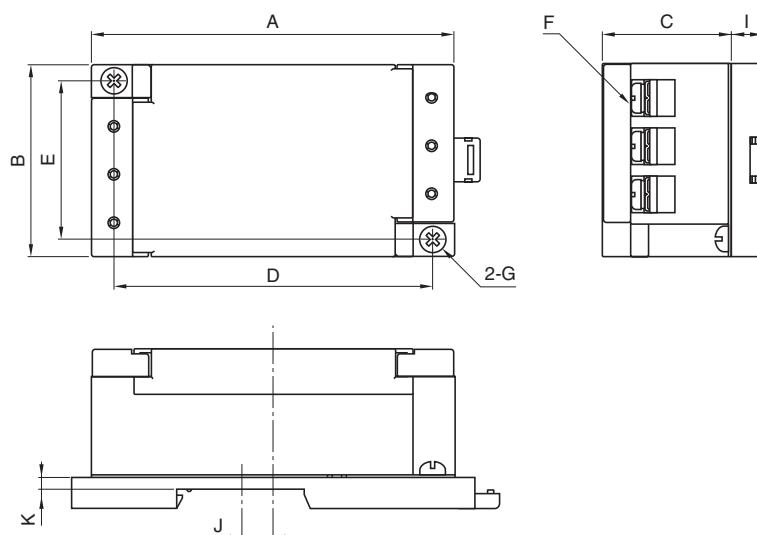


RSMN-2040/2050/2060

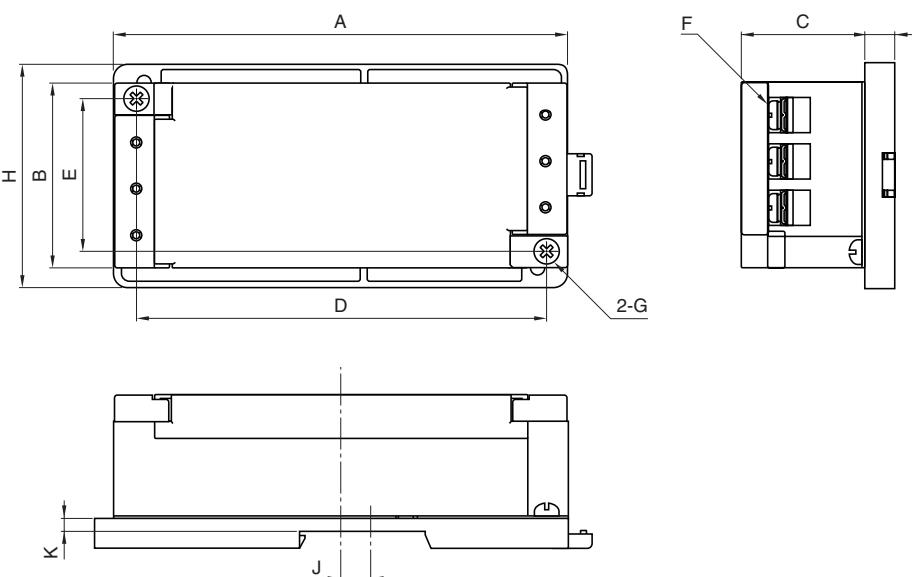


| Part No.  | Dimensions in mm |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|-----------|------------------|----|----|-----|----|----|-----|-----------------------------|--|--|--|--|--|--|--|
|           | A                | B  | C  | D   | E  | F  | ø G | Recommended clamping torque |  |  |  |  |  |  |  |
| RSMN-2003 | 98               | 52 | 35 | 86  | 43 | M4 | 4.5 | 1.27N · m                   |  |  |  |  |  |  |  |
| RSMN-2006 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
| RSMN-2010 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
| RSMN-2016 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
| RSMN-2020 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
| RSMN-2030 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
| RSMN-2040 | 127              | 52 | 35 | 115 | 43 | M4 | 4.5 | 1.27N · m                   |  |  |  |  |  |  |  |
| RSMN-2050 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
| RSMN-2060 |                  |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 272              |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 100              |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 60               |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 254              |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 82               |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | M5               |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 5.5              |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |
|           | 2.5N · m         |    |    |     |    |    |     |                             |  |  |  |  |  |  |  |

RSMN-2003D/2006D/2010D



RSMN-2016D/2020D/2030D

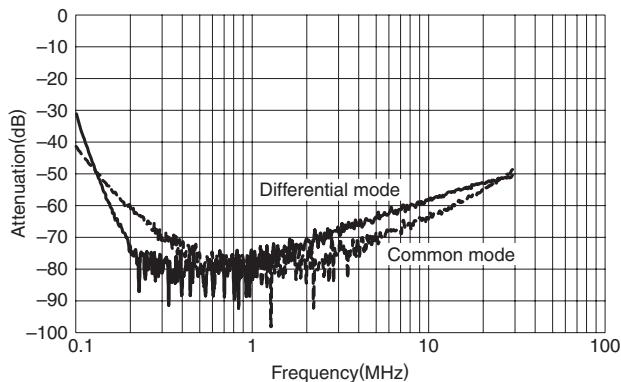


Dimensions in mm

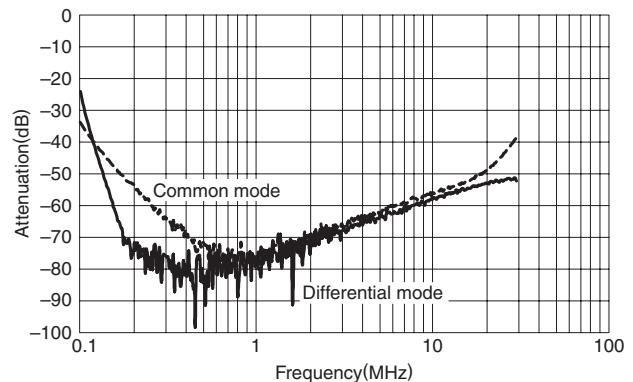
| Part No.   | A   | B  | C  | D   | E  | F  | G  | H  | I   | J   | K   |
|------------|-----|----|----|-----|----|----|----|----|-----|-----|-----|
| RSMN-2003D | 98  | 52 | 35 | 86  | 43 |    |    | -  | 8.4 | 8.5 | 3.5 |
| RSMN-2006D |     |    |    |     |    |    |    |    |     |     |     |
| RSMN-2010D |     |    |    |     |    |    |    |    |     |     |     |
| RSMN-2016D |     |    |    |     |    |    |    |    |     |     |     |
| RSMN-2020D | 127 | 52 | 35 | 115 | 43 | M4 | M4 | 63 | 8.4 | 6   | 3.5 |
| RSMN-2030D |     |    |    |     |    |    |    |    |     |     |     |

## ■ ATTENUATION vs. FREQUENCY CHARACTERISTICS

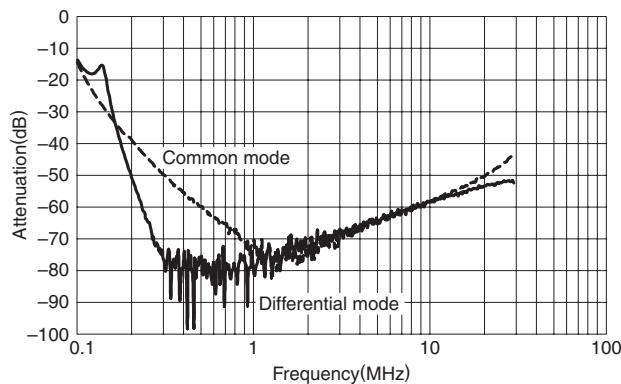
RSMN-2003



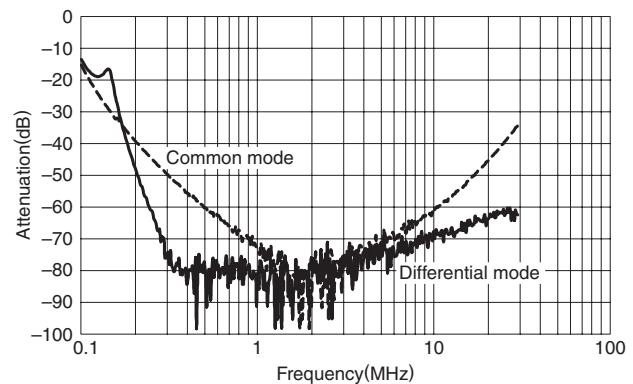
RSMN-2006



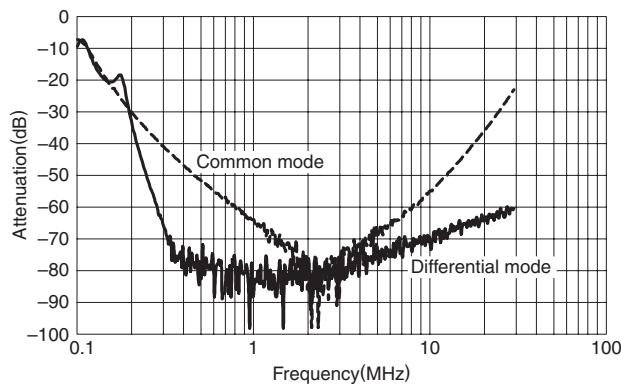
RSMN-2010



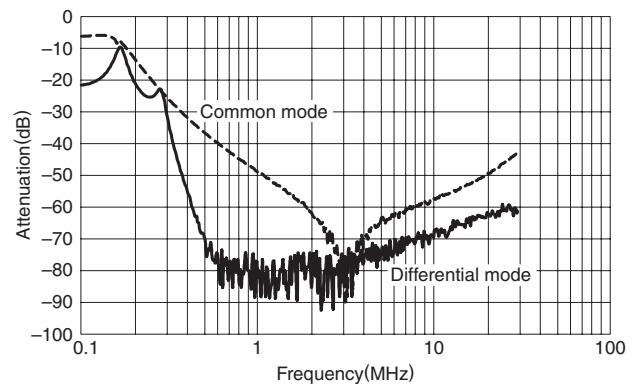
RSMN-2016



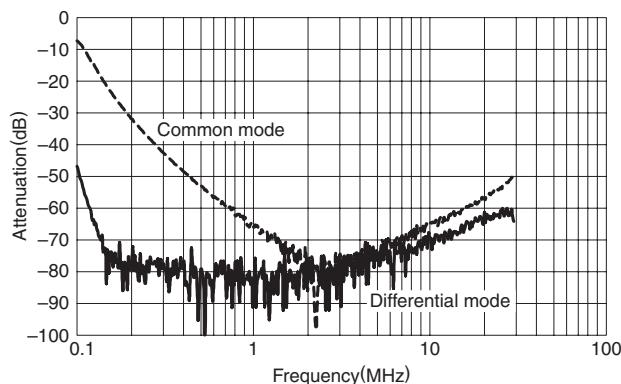
RSMN-2020



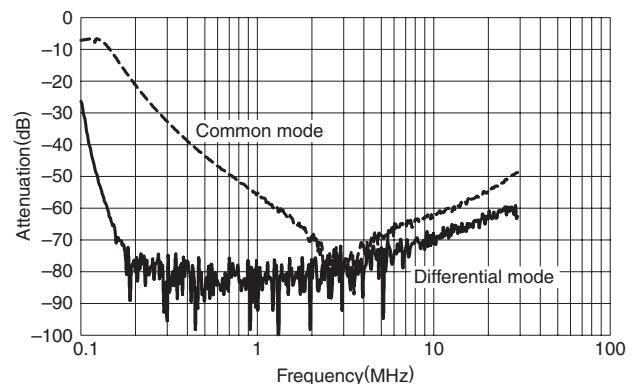
RSMN-2030



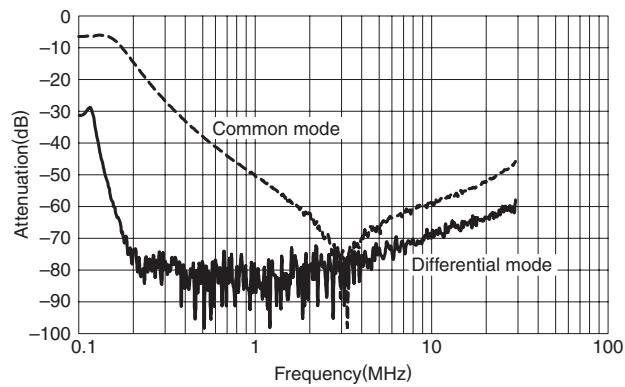
RSMN-2040



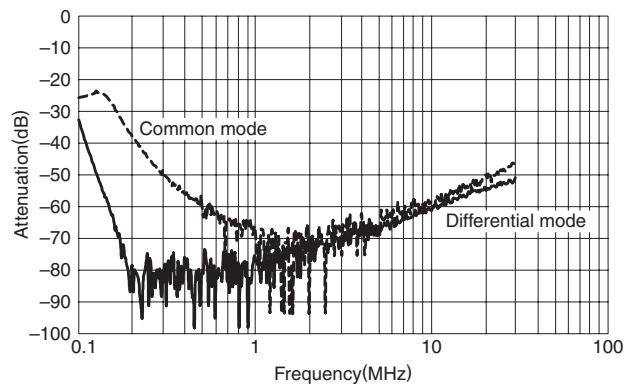
RSMN-2050



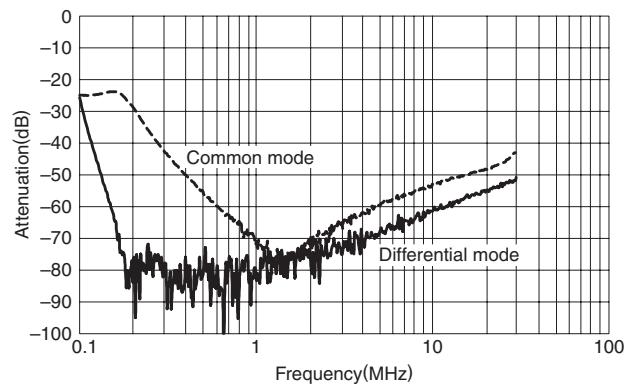
RSMN-2060



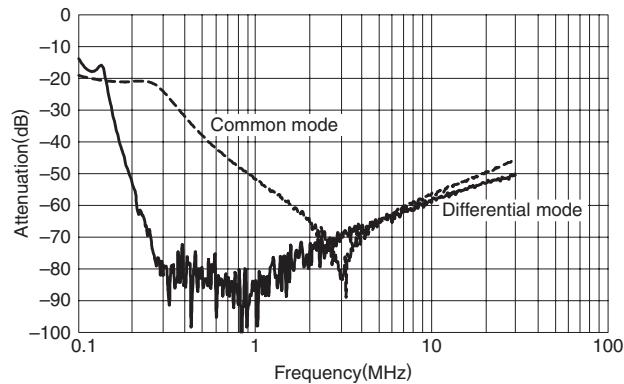
RSMN-2003L



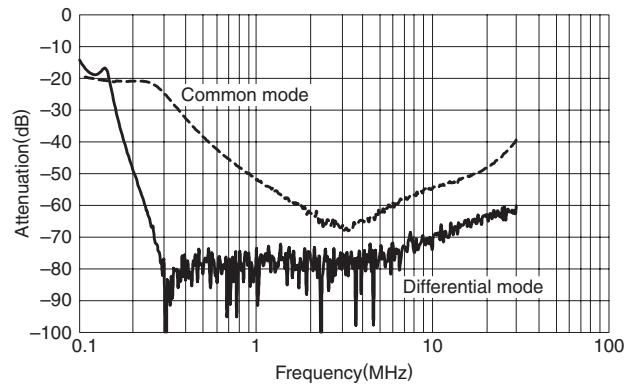
RSMN-2006L



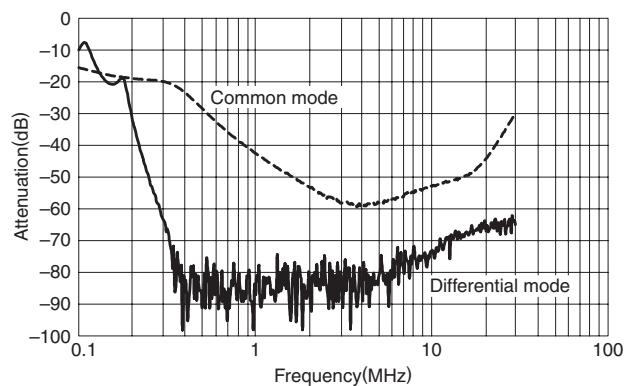
RSMN-2010L



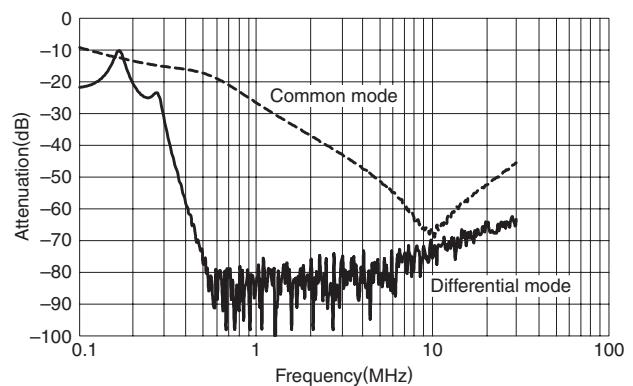
RSMN-2016L



RSMN-2020L

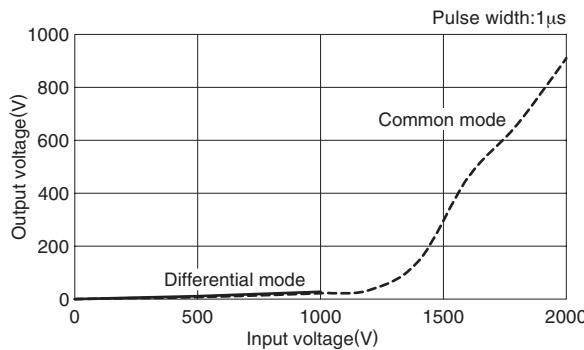


RSMN-2030L

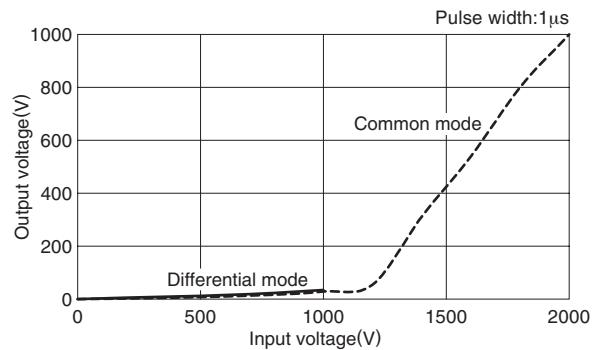


## ■ PULSE ATTENUATION CHARACTERISTICS

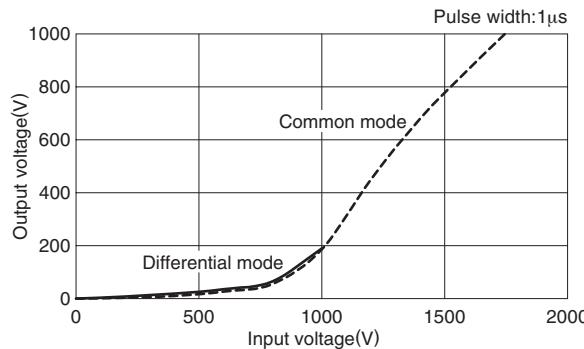
RSMN-2003/2003D



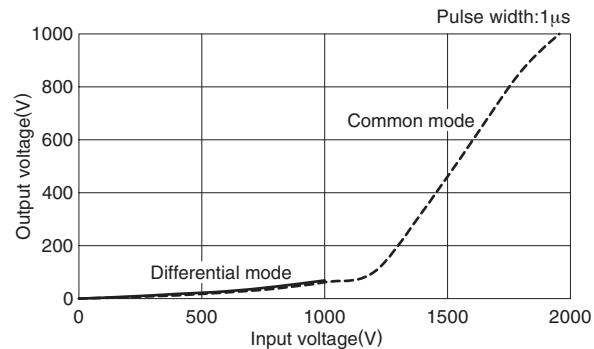
RSMN-2006/2006D



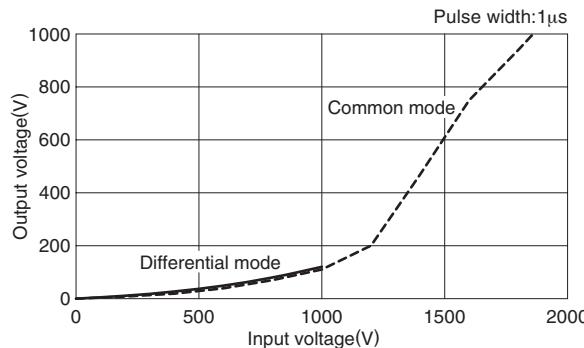
RSMN-2010/2010D



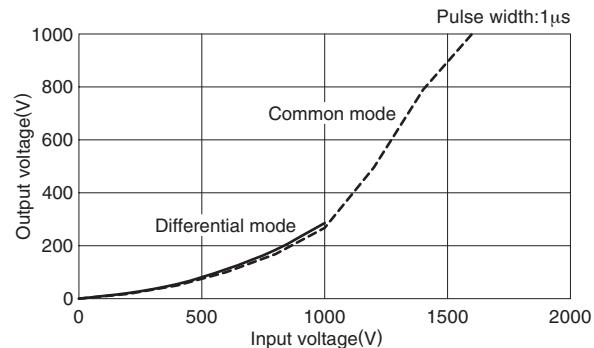
RSMN-2016/2016D



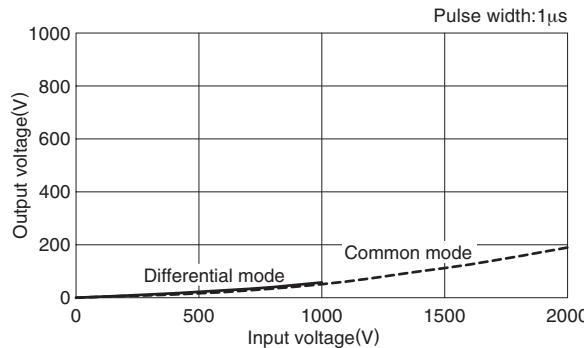
RSMN-2020/2020D



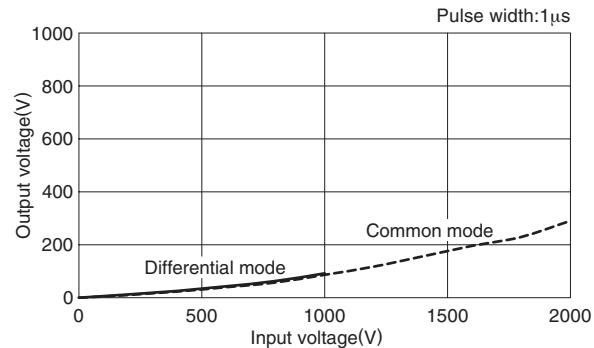
RSMN-2030/2030D



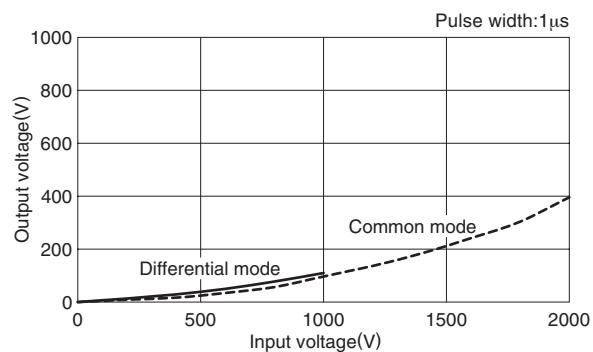
RSMN-2040



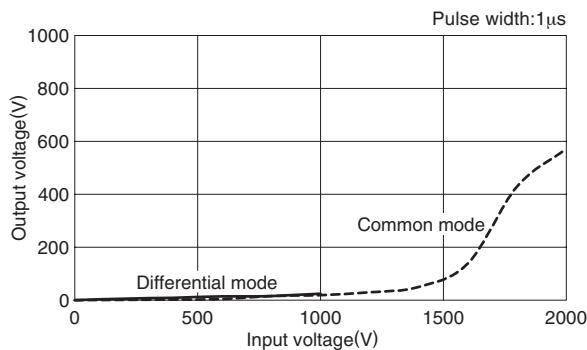
RSMN-2050



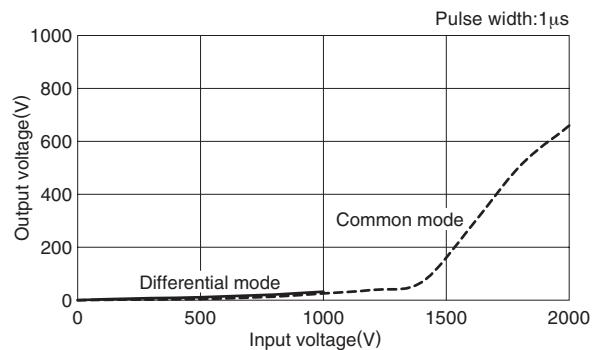
RSMN-2060



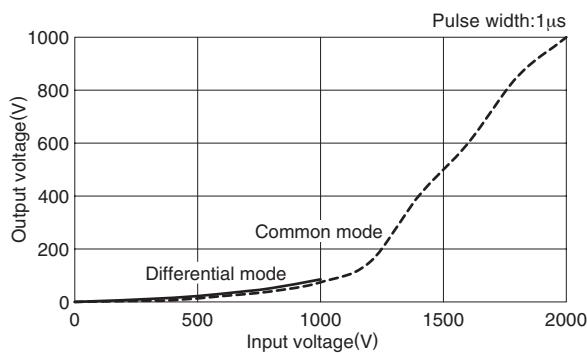
RSMN-2003L/LD



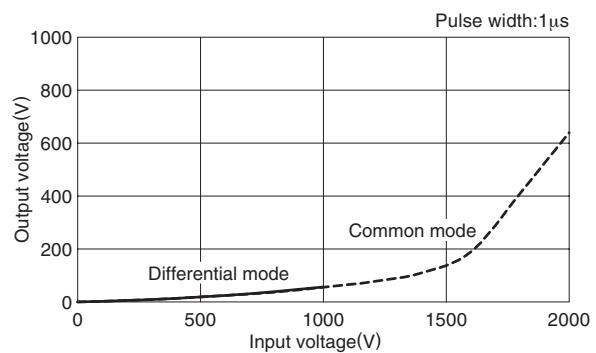
RSMN-2006L/LD



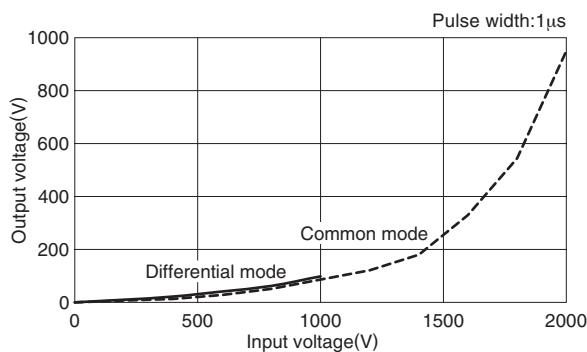
RSMN-2010L/LD



RSMN-2016L/LD



RSMN-2020L/LD



RSMN-2030L/LD

