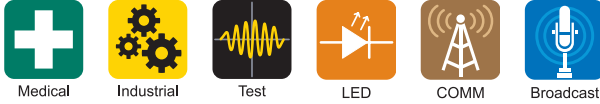
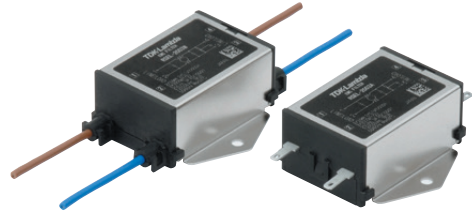


Single phase 250Vac 0.5 to 6A EMC Filters

https://product.tdk.com/en/search/emc/emc/power-line/tec_data/nf_rsel

<https://www.emea.lambda.tdk.com/uk/products/r-series>

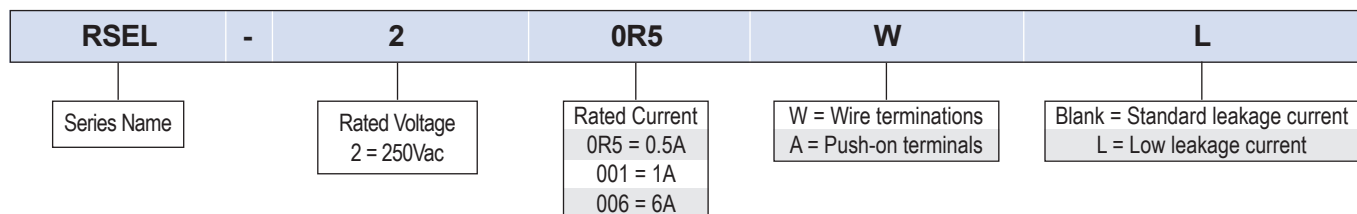


The RSEL single-phase EMC filters are enclosed in a compact case and rated at 250Vac with current levels of 0.5 to 6A, enabling the best attenuation for low current requirements. The RSEL series utilize TDK's ferrite core material to provide noise attenuation. A choice of models with either wire leads or Faston terminals #110 are available and low leakage current versions.

| Features | Benefits |
|-----------------------------|--|
| • Compact Size | • Less Space Utilized |
| • 0.5 to 6A Current Ratings | • Optimizes the Attenuation for Lower Current Requirements |
| • Lightweight | • Ideal for Portable Equipment |
| • Safety Certified | • Global Use |

| Model Selector | | | | | | |
|----------------|-------------------|---------------------|----------------------------|-----------------------------------|---------------------------|------------|
| Model | Rated Current (A) | HV Pulse Protection | Maximum DC Resistance (mΩ) | Attenuation frequency range (MHz) | | Weight (g) |
| | | | | Common mode at 25dB | Differential mode at 25dB | |
| RSEL-20R5W | 0.5 | N | 700 | 0.2 to 10 | 0.3 to 30 | 58 |
| RSEL-2001W | 1 | N | 600 | 0.3 to 10 | 0.5 to 30 | 58 |
| RSEL-2002W | 2 | N | 250 | 0.5 to 10 | 0.5 to 30 | 61 |
| RSEL-2003W | 3 | N | 150 | 0.5 to 10 | 0.5 to 30 | 61 |
| RSEL-2006W | 6 | N | 80 | 1 to 10 | 1 to 30 | 61 |
| RSEL-20R5A | 0.5 | N | 700 | 0.2 to 10 | 0.3 to 30 | 43 |
| RSEL-2001A | 1 | N | 600 | 0.3 to 10 | 0.5 to 30 | 43 |
| RSEL-2002A | 2 | N | 250 | 0.5 to 10 | 0.5 to 30 | 46 |
| RSEL-2003A | 3 | N | 150 | 0.5 to 10 | 0.5 to 30 | 46 |
| RSEL-2006A | 6 | N | 80 | 1 to 10 | 1 to 30 | 46 |

| Model Selector | | | | | | |
|----------------|-------------------|---------------------|----------------------------|-----------------------------------|---------------------------|------------|
| Model | Rated Current (A) | HV Pulse Protection | Maximum DC Resistance (mΩ) | Attenuation frequency range (MHz) | | Weight (g) |
| | | | | Common mode at 15dB | Differential mode at 25dB | |
| RSEL-20R5WL | 0.5 | N | 700 | 0.1 to 5 | 0.3 to 30 | 56 |
| RSEL-2001WL | 1 | N | 600 | 0.1 to 5 | 0.5 to 30 | 56 |
| RSEL-2002WL | 2 | N | 250 | 0.1 to 5 | 0.5 to 30 | 59 |
| RSEL-2003WL | 3 | N | 150 | 0.1 to 5 | 0.5 to 30 | 59 |
| RSEL-2006WL | 6 | N | 80 | 1 to 30 | 1 to 30 | 59 |
| RSEL-20R5AL | 0.5 | N | 700 | 0.1 to 5 | 0.3 to 30 | 41 |
| RSEL-2001AL | 1 | N | 600 | 0.1 to 5 | 0.5 to 30 | 41 |
| RSEL-2002AL | 2 | N | 250 | 0.1 to 5 | 0.5 to 30 | 44 |
| RSEL-2003AL | 3 | N | 150 | 0.1 to 5 | 0.5 to 30 | 44 |
| RSEL-2006AL | 6 | N | 80 | 1 to 30 | 1 to 30 | 44 |



| Related Products | | | | | | | | | |
|---|--------------------|----------------------|---------------|---------------------|------------|----------------|-------|--------------------|------------|
| Type | Current Rating (A) | Series | Low Leakage | Faston on Terminals | Wire Leads | DIN Rail Mount | Fused | Discharge Resistor | Metal Case |
| General purpose with faston terminals | 6 | RSEC | | | | | | | |
| General purpose | 0.5 - 6 | RSEL | Y | Y | Y | | | | Y |
| HV pulse protection | 0.5 - 6 | RSAL | Y | Y | Y | | | | Y |
| Power Entry Module with line filter | 3, 6, 10 | RPE | Y | | | | Y | Y | |
| Power Entry Module with line filter, HV Pulse | 3, 6, 10 | RPA | Y | | | | | Y | |
| Compact size with screw terminals | 6 - 30 | RSEV | | | | DIN-RSEV* | | | |
| Multipurpose | 3 - 300 | RSEN | Y (Up to 30A) | | | Y (Up to 30A) | | | |
| Multipurpose with HV pulse protection | 3 - 60 | RSAN | Y (Up to 30A) | | | Y (Up to 30A) | | | |
| High attenuation | 3 - 300 | RSHN | Y (Up to 30A) | | | Y (Up to 30A) | | | |
| High attenuation with pulse protection | 3 - 300 | RSMN | Y (Up to 30A) | | | Y (Up to 30A) | | | |
| Wide band, high attenuation | 6 - 30 | RSKN | | | | | | | |

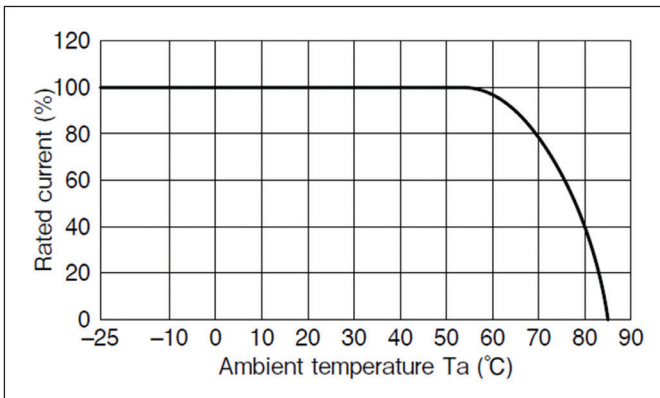
* Separate mounting bracket
[Click here for TDK-Lambda three phase filters.](#)

| Specification | | |
|-------------------------------------|---------|--|
| Model | | |
| Input | | |
| Rated Voltage | Vac/Vdc | 250 (Safety certified for AC input only) |
| Input Frequency | Hz | 47 - 63 |
| Leakage Current (250Vac, 60Hz) | mA | RSEL-20xxW or A suffix models: 1mA, RSEL-20xxWL or AL models: 0.01mA |
| Safety Certifications and Markings | - | UL1283, CSA C22.2 No.8, EN60939-1/-2 (ENEC14), conforms to RoHS Directive |
| Environmental | | |
| Operating Temperature | °C | -25 to +85, derating above 55. See derating curve below |
| Storage Temperature | °C | -25 to +85 |
| Humidity (non condensing) | %RH | Operating: 15 - 85, Storage 5 - 85 |
| Cooling | - | Convection |
| Withstand Voltage | Vac | 2,500 input to earth |
| Isolation Resistance (For 1 minute) | MΩ | >100 at 500Vdc |
| Vibration | - | 10-55Hz Amplitude 1.5mm, Sweep for 1 min. X, Y and Z directions for 2 hours each |
| Other | | |
| Weight (Typ) | g | See model selector |
| Size (LxWxH) | mm | See outline drawings |
| Size (LxWxH) | - | See outline drawings |
| Connectors | - | Faston or AWG20 wire. See outline drawing |
| Case Material | - | Metal / plastic |
| MTBF - MIL-HDBK-217F NOTICE2 GF | Hours | RSEL-2001A: 9,978,048, RSEL-2006AL: 26,441,036 |
| Warranty | Years | 5 |

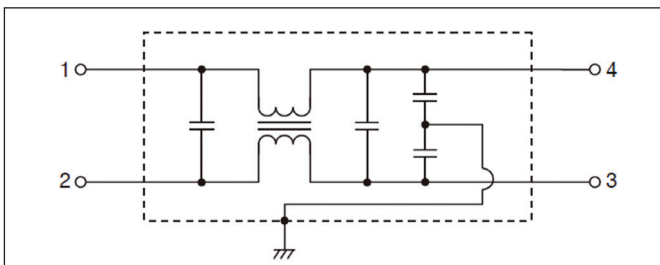
Notes
 See website for detailed specifications, test methods and installation manual
[RSEL technical files](#)

Mechanical Specification

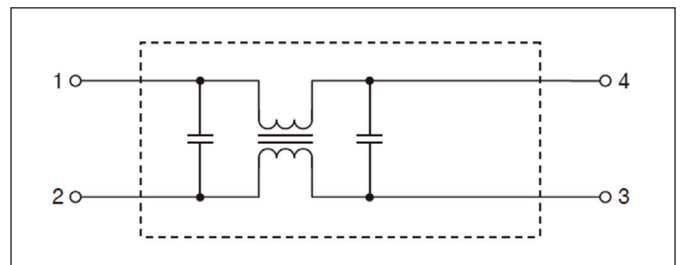
Derating Curve (All models)



Schematic RSEL-2xxxW and RSEL-2xxxA

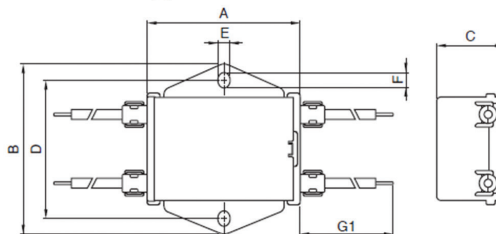


Schematic RSEL-2xxxWL and RSEL-2xxxAL

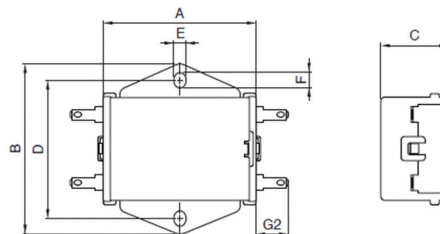


Outline Drawing

RSEL-20R5/2001/2002/2003/2006W(L)



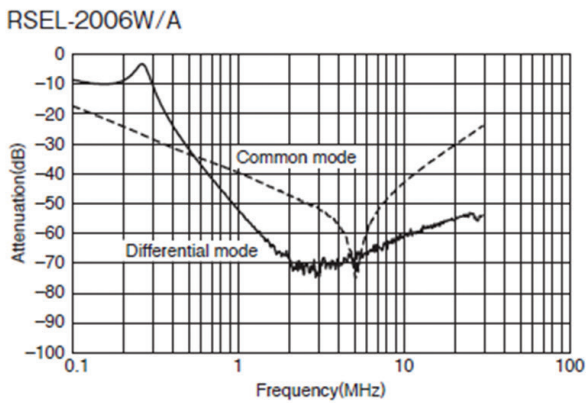
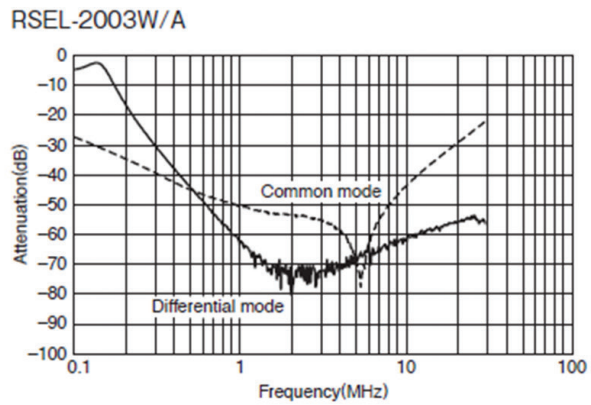
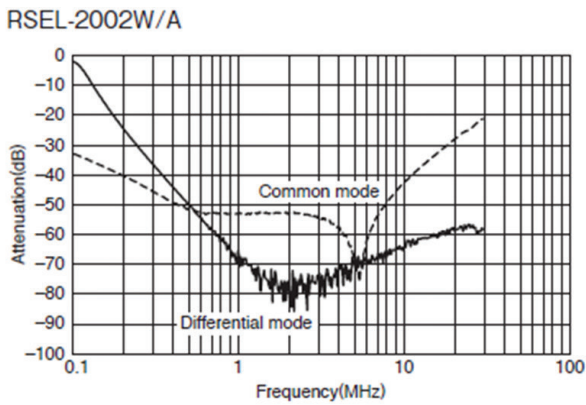
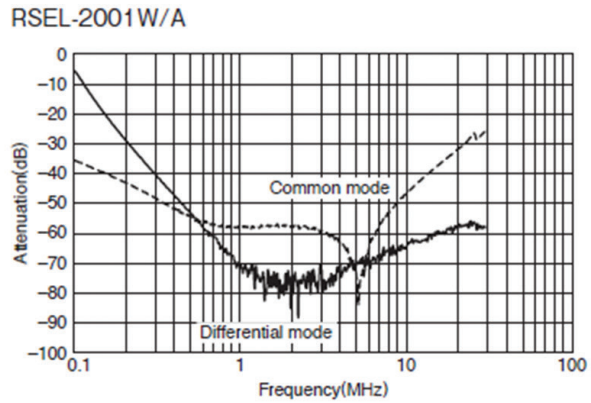
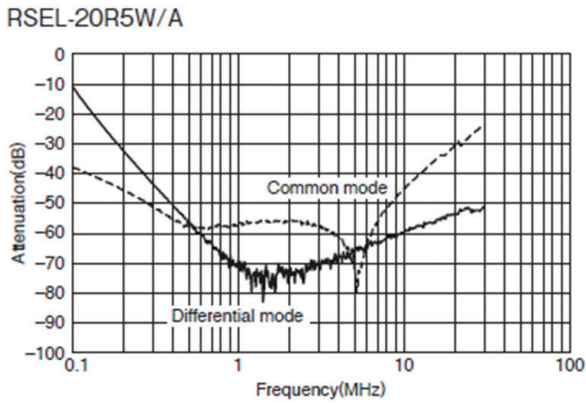
RSEL-20R5/2001/2002/2003/2006A(L)



Dimensions in mm

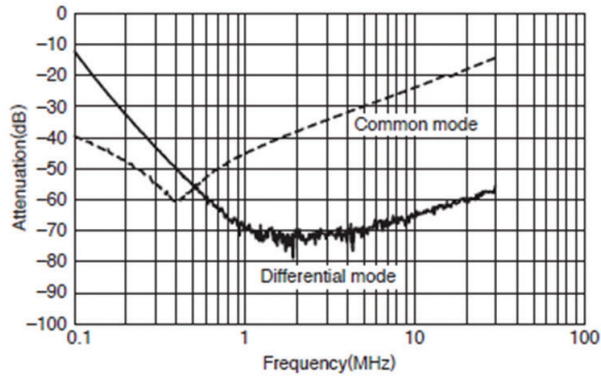
| Part No. | A | B | C | D | E | F | G1 | G2 |
|---------------|----|----|----|----|-----|-----|-----|----|
| RSEL-20R5W(L) | 45 | 50 | 20 | 40 | 3.5 | 4.5 | 300 | - |
| RSEL-2001W(L) | | | | | | | | |
| RSEL-2002W(L) | | | | | | | | |
| RSEL-2003W(L) | | | | | | | | |
| RSEL-2006W(L) | | | | | | | | |
| RSEL-20R5A(L) | 45 | 50 | 20 | 40 | 3.5 | 4.5 | - | 9 |
| RSEL-2001A(L) | | | | | | | | |
| RSEL-2002A(L) | | | | | | | | |
| RSEL-2003A(L) | | | | | | | | |
| RSEL-2006A(L) | | | | | | | | |

RSEL Attenuation vs. Frequency

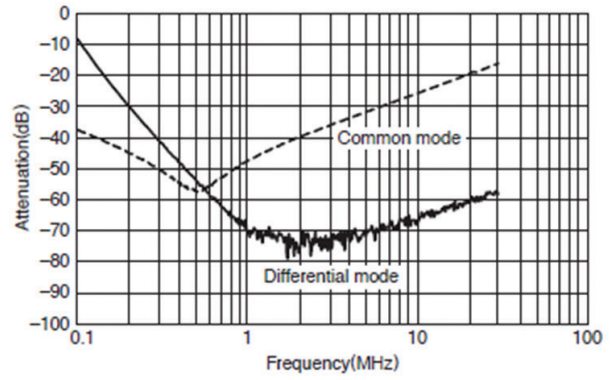


RSEL Attenuation vs. Frequency

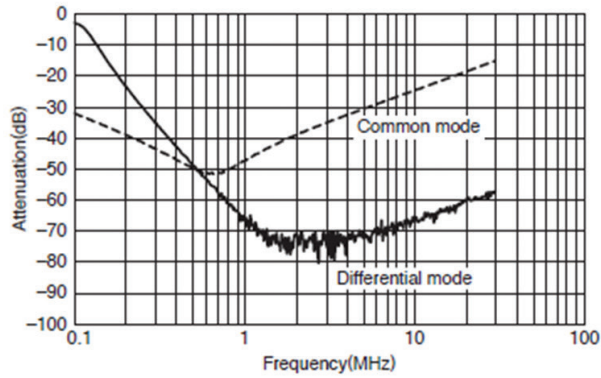
RSEL-20R5WL/AL



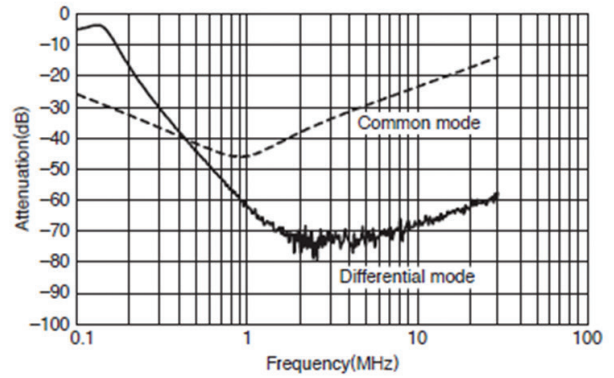
RSEL-2001WL/AL



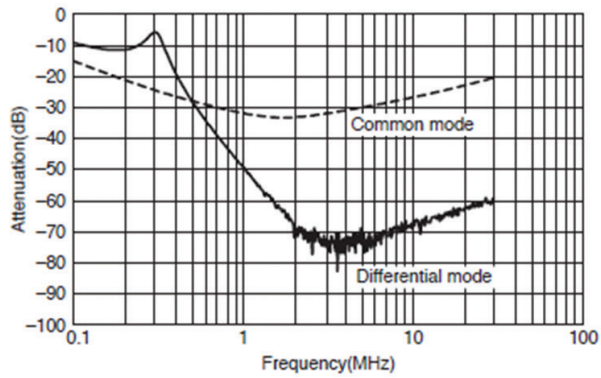
RSEL-2002WL/AL



RSEL-2003WL/AL



RSEL-2006WL/AL





TDK-Lambda France SAS

Tel: +33 1 60 12 71 65
 tf.fr-powersolutions@tdk.com
 www.emea.lambda.tdk.com/fr



Italy Sales Office

Tel: +39 02 61 29 38 63
 tf.it-powersolutions@tdk.com
 www.emea.lambda.tdk.com/it



Netherlands

tf.nl-powersolutions@tdk.com
 www.emea.lambda.tdk.com/nl



TDK-Lambda Germany GmbH

Tel: +49 7841 666 0
 tlg.powersolutions@tdk.com
 www.emea.lambda.tdk.com/de



Austria Sales Office

Tel: +43 2256 655 84
 tlg.at-powersolutions@tdk.com
 www.emea.lambda.tdk.com/at



Switzerland Sales Office

Tel: +41 44 850 53 53
 tlg.ch-powersolutions@tdk.com
 www.emea.lambda.tdk.com/ch



Nordic Sales Office

Tel: +45 8853 8086
 tlg.dk-powersolutions@tdk.com
 www.emea.lambda.tdk.com/dk



TDK-Lambda UK Ltd.

Tel: +44 (0) 12 71 85 66 66
 tlu.powersolutions@tdk.com
 www.emea.lambda.tdk.com/uk



TDK-Lambda Ltd.

Tel: +9 723 902 4333
 tli.powersolutions@tdk.com
 www.emea.lambda.tdk.com/il-en



TDK-Lambda Americas

Tel: +1 800-LAMBDA-4 or 1-800-526-2324
 tla.powersolutions@tdk.com
 www.us.lambda.tdk.com



TDK Electronics do Brasil Ltda

Tel: +55 11 3289-9599
 sales.br@tdk-electronics.tdk.com
 www.tdk-electronics.tdk.com/en



TDK-Lambda Corporation

Tel: +81-3-6778-1113
 www.jp.lambda.tdk.com



TDK-Lambda (China) Electronics Co. Ltd.

Tel: +86 21 6485-0777
 tlc.powersolutions@tdk.com
 www.lambda.tdk.com.cn



TDK-Lambda Singapore Pte Ltd.

Tel: +65 6251 7211
 tfs.marketing@tdk.com
 www.sg.lambda.tdk.com



TDK India Private Limited, Power Supply Division

Tel: +91 80 4039-0660
 mathew.philip@tdk.com
 www.sg.lambda.tdk.com



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