

# Roxburgh RES10 Series EMI Filters

## Single-Phase General Purpose EMI Filters

The Roxburgh RES10 Series single-stage filters are specifically designed as line filters for 120/240 VAC devices. RES10 Series provide excellent attenuation performance for RFI and general

purpose filtering applications. The filters are designed for fast and easy integral mounting on chassis hardware.

### Features

- 0-240 VAC/DC, 0-400 Hz, single-phase
- 1A- 30A models
- Metal case, miniature type
- 1/4" quick disconnect or screw terminals
- Quick and easy mounting

Filter performance curves are available on item page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

### Applications

- Ideally suited for products that must conform to part 15, FCC regulations
- Digital electronics
- Personal computers and peripherals
- Office automation
- Building automation
- Monitors and display units
- Household and consumer devices
- Machinery design

### Standards and Certifications



| RES EMI Filters          |         |                                         |
|--------------------------|---------|-----------------------------------------|
| Part Number              | Price   | Description                             |
| <a href="#">RES10F01</a> | \$24.00 | EMI Input Filter 120/240 VAC, 1-ph, 1A  |
| <a href="#">RES10F03</a> | \$24.00 | EMI Input Filter 120/240 VAC, 1-ph, 3A  |
| <a href="#">RES10F06</a> | \$27.00 | EMI Input Filter 120/240 VAC, 1-ph, 6A  |
| <a href="#">RES10F10</a> | \$27.00 | EMI Input Filter 120/240 VAC, 1-ph, 10A |
| <a href="#">RES10F12</a> | \$33.00 | EMI Input Filter 120/240 VAC, 1-ph, 12A |
| <a href="#">RES10F13</a> | \$31.00 | EMI Input Filter 120/240 VAC, 1-ph, 13A |
| <a href="#">RES10F16</a> | \$38.00 | EMI Input Filter 120/240 VAC, 1-ph, 16A |
| <a href="#">RES10S20</a> | \$44.00 | EMI Input Filter 120/240 VAC, 1-ph, 20A |
| <a href="#">RES10S30</a> | \$82.00 | EMI Input Filter 120/240 VAC, 1-ph, 30A |

| General Specifications             |                                                         |
|------------------------------------|---------------------------------------------------------|
| <b>Voltage Rating</b>              | 0-240V AC/DC, 0-400 Hz                                  |
| <b>Voltage Max.</b>                | 250V                                                    |
| <b>Voltage Withstand</b>           | 3000VDC/2 sec                                           |
| <b>Phase</b>                       | 1                                                       |
| <b>UL/IEC Pollution Class</b>      | Degree II                                               |
| <b>Humidity</b>                    | 93% RH (non-condensing)                                 |
| <b>Overload Current</b>            | 135% 2Hrs, 150% 60s                                     |
| <b>Insulation Resistance</b>       | 500VDC >3.5 MΩ                                          |
| <b>Climate Class (IEC 60068-1)</b> | 25/100/21                                               |
| <b>Temperature Rise</b>            | 60°C                                                    |
| <b>Temperature Rating</b>          | -13 to 212°F (-25 to 100°C)                             |
| <b>Flammability (UL94)</b>         | V-2                                                     |
| <b>Case Material</b>               | Nickel Plated Steel                                     |
| <b>Altitude*</b>                   | 1000m (3000m with derating)                             |
| <b>Mounting Clearance</b>          | >50mm Gap                                               |
| <b>Agency Approval**</b>           | cURus: File# E191581<br>(Standard: UL1283 & C22.2 No.8) |

\* Derate 1% per 100m after 1000m; Max 3000m.

\*\*To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific component part number web page.

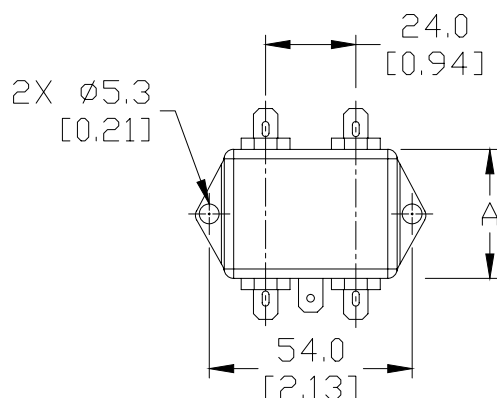
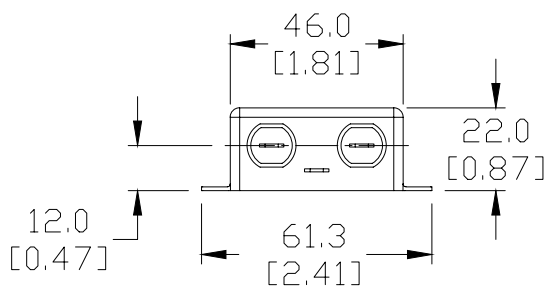
# Roxburgh RES10 Series EMI Filters

| Specifications                      |                       |          |          |            |          |             |             |             |            |
|-------------------------------------|-----------------------|----------|----------|------------|----------|-------------|-------------|-------------|------------|
| Parameter                           | RES10F01              | RES10F03 | RES10F06 | RES10F10   | RES10F12 | RES10F13    | RES10F16    | RES10S20    | RES10S30   |
| Max. Power (kW)                     | 0.25                  | 0.75     | 1.5      | 2.5        | 3        | 3.25        | 4           | 5           | 7.5        |
| Current Rating (A)                  | 1                     | 3        | 6        | 10         | 12       | 13          | 16          | 20          | 30         |
| SCCR Rating (kA)                    | 5                     |          |          |            |          |             |             |             |            |
| Ingress Protection                  | IP20                  |          |          |            |          |             |             |             |            |
| Terminal Style                      | 1/4" Quick Disconnect |          |          |            |          |             |             | M4 Stud     |            |
| Torque, (lb·in [N·m])               | N/A                   |          |          |            |          |             |             | 11.5 [1.3]  |            |
| Operational Leakage Current (mA)    | 0.74                  |          |          |            |          |             |             |             | 0.87       |
| Total Resistance, Line to Load (mΩ) | 300                   | 100      | 25       | 50         | 45       | 25          | 50          | 25          |            |
| Residual Voltage (V@5s)             | 1V@5s                 |          |          |            |          |             |             |             |            |
| Heat Dissipation (W)                | 0.6                   | 0.9      |          | 5          | 6.48     | 4.23        | 12.8        | 20          | 22.5       |
| Weight (lb [kg])                    | 0.15 [0.07]           |          |          | 0.2 [0.09] |          | 0.15 [0.07] | 0.29 [0.13] | 0.46 [0.21] | 1.0 [0.42] |

## Dimensions

mm [inches]

RES10F01  
RES10F03  
RES10F06  
RES10F13



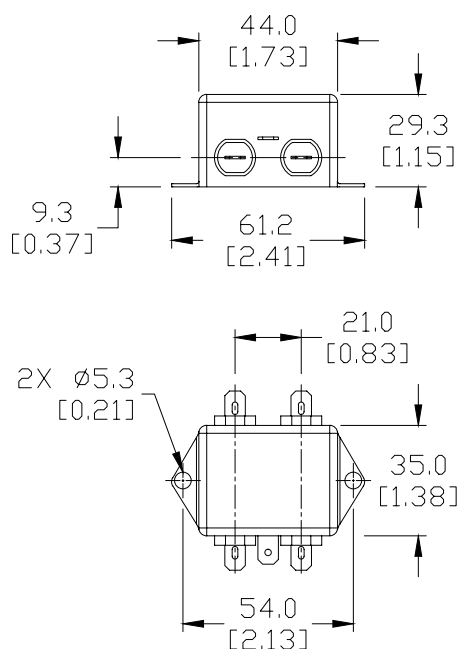
| PART NUMBER | A           |
|-------------|-------------|
| RES10F01    | 34.3 [1.35] |
| RES10F03    | 32.0 [1.26] |
| RES10F06    | 32.0 [1.26] |
| RES10F13    | 34.3 [1.35] |

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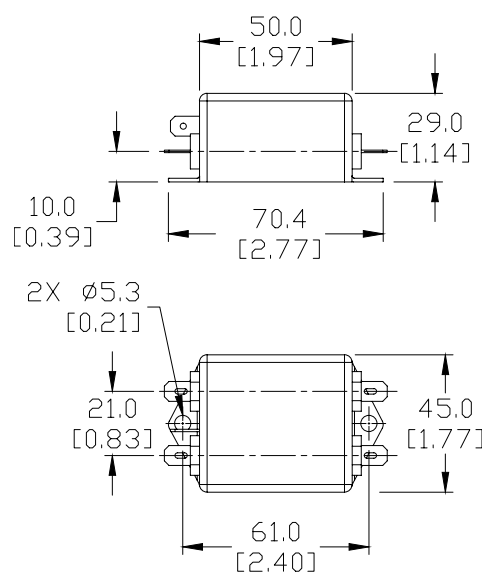
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mm [inches]

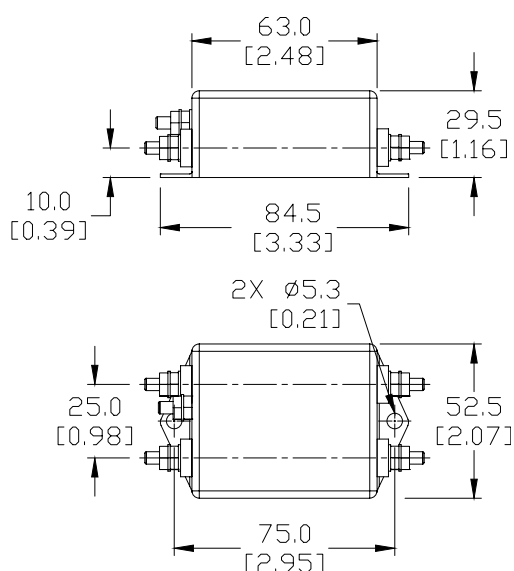
**RES10F10**  
**RES10F12**



**RES10F16**



**RES10S20**



**RES10S30**

