

# RP105 Series

## Compact Single Stage Power Line Filters



### 3 A to 20 A Chassis Mount Filter

#### Specifications

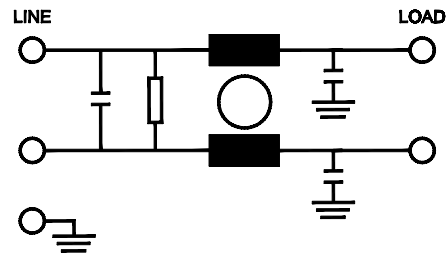
|                         |                |
|-------------------------|----------------|
| Operating Frequency     | 50/60 Hz       |
| Usable Frequency        | DC - 400 Hz    |
| Max. Operating Voltage* | 250 V +10%     |
| Ambient Temperature     | -25 to 40°C    |
| Climatic Category       | 25/100/21      |
| Hipot Rating (L-G)      | 2700 VDC       |
| Terminals (-T)          | QD: 0.25 Tabs  |
| Safety Approvals        | cURus, EN60939 |
| Typ. Weight, lbs (kg)   | 0.3 (0.1)      |

\*Available up to 300 VAC. Please contact us to verify specifications.

#### Part Number/Ordering

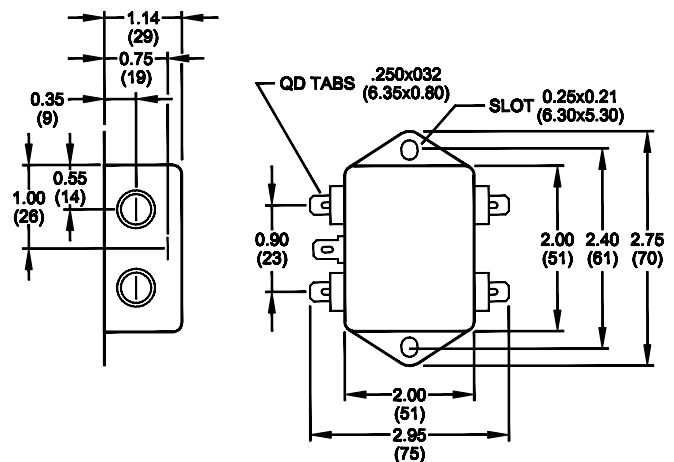
| RP105 | -X<br>(Amps) | -Y<br>(Ycap, nF) | -T |
|-------|--------------|------------------|----|
|       | 3            | 0                | QD |
|       | 6            | 0.47             |    |
|       | 10           | 1                |    |
|       | 16           | 2.2              |    |
|       | 20           | 4.7              |    |
|       |              | 10               |    |

**Note:** Use any combination of -Y with any -X (Amps) rating  
e.g. RP105-10-4.7-QD (10 Amps with 4.7 nF Ycap)



#### Mechanical Dimensions

TYPICAL TOLERANCE: +/-0.02" (0.50 mm)



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### 3 A to 20 A Chassis Mount Filter

#### Typical Insertion Loss, dB (50/50 Ohm)

| Freq (MHz)    | 0.15 | 0.5 | 1.0 | 10 | 30 |
|---------------|------|-----|-----|----|----|
| <b>3 Amp</b>  |      |     |     |    |    |
| CM(dB)        | 38   | 50  | 50  | 50 | 54 |
| DM(dB)        | 20   | 36  | 60  | 65 | 70 |
| <b>6 Amp</b>  |      |     |     |    |    |
| CM(dB)        | 34   | 44  | 54  | 50 | 44 |
| DM(dB)        | 20   | 32  | 46  | 65 | 70 |
| <b>10 Amp</b> |      |     |     |    |    |
| CM(dB)        | 26   | 36  | 44  | 50 | 44 |
| DM(dB)        | 20   | 32  | 44  | 60 | 70 |
| <b>16 Amp</b> |      |     |     |    |    |
| CM(dB)        | 20   | 32  | 39  | 55 | 55 |
| DM(dB)        | 20   | 32  | 40  | 58 | 70 |
| <b>20 Amp</b> |      |     |     |    |    |
| CM(dB)        | 14   | 22  | 30  | 50 | 58 |
| DM(dB)        | 20   | 32  | 40  | 54 | 70 |
| <b>10 Amp</b> |      |     |     |    |    |
| CM(dB)        | 26   | 36  | 44  | 58 | 64 |
| DM(dB)        | 20   | 32  | 44  | 60 | 70 |
| <b>16 Amp</b> |      |     |     |    |    |
| CM(dB)        | 20   | 32  | 39  | 55 | 55 |
| DM(dB)        | 20   | 32  | 40  | 58 | 70 |
| <b>20 Amp</b> |      |     |     |    |    |
| CM(dB)        | 14   | 22  | 30  | 50 | 58 |
| DM(dB)        | 20   | 32  | 40  | 54 | 70 |

#### Leakage Current

| Y-cap, nF | mA,<br>120 V/60 Hz | mA,<br>250 V/60 Hz |
|-----------|--------------------|--------------------|
| 0         | 0.0                | 0.0                |
| 0.47      | 0.04               | 0.08               |
| 1         | 0.09               | 0.18               |
| 2.2       | 0.2                | 0.4                |
| 4.7       | 0.4                | 0.8                |
| 10        | 0.9                | 1.8                |

Specifications are subject to change. Consult factory to verify specifications.

For more information on our filter products call us at: (800) 527-4362 or (714) 289-0055  
LCR, Radius Power, and Filter Concepts are now part of Astrodyne TDI