

RPM7020

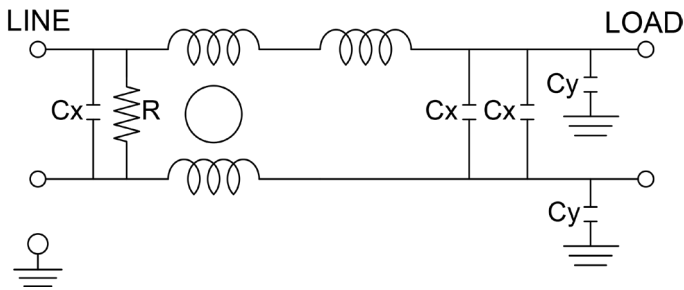
MIL/COTS COMPACT AC, SINGLE PHASE EMI POWER LINE FILTER

FEATURES

- » Rated currents include **5A, 10A, 15A, and 20A**
- » Dual Stage Line Filter
- » Available with **QD** (tabs) and **S** (studs) option
- » Agency Approved to RoHS
- » Y-cap value can be adjusted to fit specification



ELECTRICAL SCHEMATIC



SPECIFICATIONS

| | |
|------------------------|-------------------------------------|
| OPERATING FREQUENCY | 50/60/400 Hz |
| MAX. OPERATING VOLTAGE | 300 VAC +10% |
| AMBIENT TEMPERATURE | -40 TO 70°C |
| CLIMATIC CATEGORY | 25/100/21 |
| TERMINALS (-T) | QD: 0.25" TABS STUDS: 5-20A (M5) |
| TYP. WEIGHT, LBS (KG) | 0.5 (0.2) |

TYPICAL LEAKAGE CURRENT

@ 250 VAC 60 Hz 0 - 3.50 mA Max.

HIPOT RATINGS

LINE TO GROUND 1800 VDC

TYPICAL APPLICATIONS

- ✓ Mil-461/ DO-160

NOTE:

- ✓ Call for other termination types (e.g. Circular Mil-Connectors, etc.) Leakage current is determined by the line to ground capacitors in the filter. The capacitors can be easily varied to match the system leakage requirements.

HOW TO ORDER

RPM7020 - Y - Z

Z = TERMINAL (-T)
X = RATED CURRENT

RPM7020=FILTER SERIES

NOTE: USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS

E.G. **RPM7020-5-QD** (5AMPS)

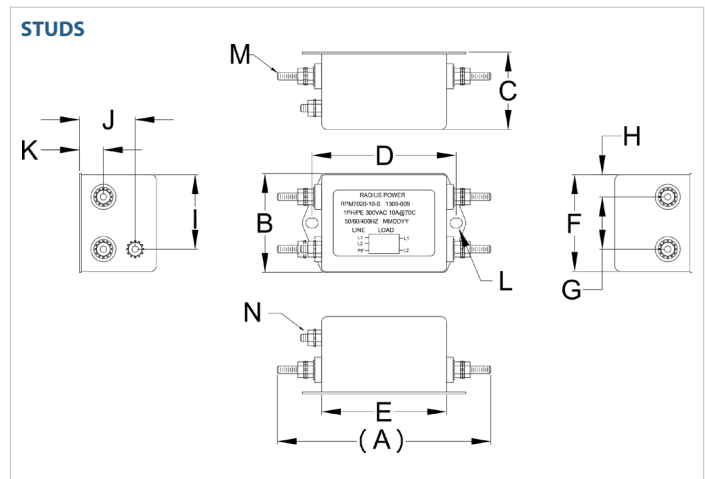
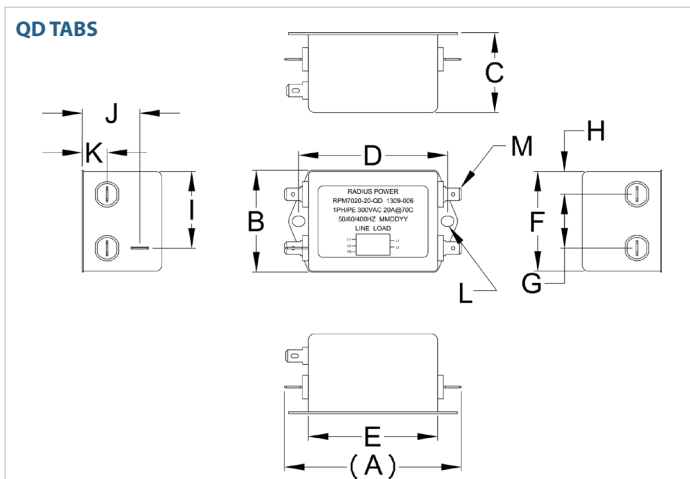
For **X** and **Y** options see product specification table.

RPM7020

MIL/COTS COMPACT AC, SINGLE PHASE EMI POWER LINE FILTER

| MODEL NO. | RATED CURRENT, A @ 40° C | Y-CAP, nF | LEAKAGE CURRENT, mA @ 250V AC, 60 Hz | TERMINAL OPTIONS | | | MAX. DIMENSIONS" (MM) | | |
|---------------------|--------------------------|-----------|--------------------------------------|-------------------|------------------|------------------|-----------------------|------------|-----------|
| | | | | (QD) INPUT/OUTPUT | (W) INPUT/OUTPUT | (S) INPUT/OUTPUT | WIDTH | (LENGTH) | HEIGHT |
| RPM7020-5-QD | 5 | 22 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-5-QD 10NF | 5 | 10 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-5-S | 5 | 22 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-5-S 10NF | 5 | 10 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-10-QD | 10 | 22 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-10-QD 10 NF | 10 | 10 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-10-S | 10 | 22 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-10-S 10NF | 10 | 10 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-15-QD | 10 | 22 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-15-QD 10 NF | 10 | 10 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-15-S | 15 | 22 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-15-S 10NF | 15 | 10 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-20-QD | 20 | 22 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-20-QD 10NF | 20 | 10 | 3.50 | ✓ | | | 2.01"(51) | 3.50"(89) | 1.61"(41) |
| RPM7020-20-S | 20 | 22 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |
| RPM7020-20-S 10NF | 20 | 10 | 3.50 | | | ✓ | 2.01"(51) | 4.29"(109) | 1.61"(41) |

RPM7020 MECHANICAL OUTLINES (MM)



RPM7020

MIL/COTS COMPACT **AC**, SINGLE PHASE EMI POWER LINE FILTER

| SERIES | (A) | B | C | D | E | F | G | H | I | J | K | L | M | N |
|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------------------|-----------------------------------|---------------|
| QD TABS | 3.50" (89) | 2.01" (51) | 1.61" (41) | 2.95" (75) | 2.56" (65) | 2.01" (51) | 1.06" (27) | 0.45" (11) | 1.52" (39) | 1.14" (29) | 0.49" (13) | Ø 0.25"X0.20", 2X (Ø, 6.4x5.1, 2x) | 0.25", 5X (QD, MALE, 6.35, 5x) | N/A |
| STUDS | 4.29" (109) | 2.01" (51) | 1.61" (41) | 2.95" (75) | 2.60" (66) | 2.01" (51) | 1.06" (27) | 0.45" (12) | 1.52" (39) | 1.14" (29) | 0.49" (13) | Ø 0.25"X0.20", 2X (Ø, 6.4x5.1, 2x) | STUD, M5, 4x | STUD, GND, M5 |

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

TYPICAL INSERTION LOSS, dB (50/50 Ohm)

| Amps | Freq (MHz) | Insertion Loss (dB) | | | | | |
|------|------------|---------------------|-----|-----|----|----|--|
| | | 0.15 | 0.5 | 1.0 | 10 | 30 | |
| 5 | CM (dB) | 30 | 50 | 50 | 45 | 30 | |
| | DM (dB) | 40 | 60 | 60 | 40 | 30 | |
| 10 | CM (dB) | 30 | 50 | 50 | 45 | 30 | |
| | DM (dB) | 40 | 60 | 60 | 40 | 30 | |
| 15 | CM (dB) | 30 | 50 | 50 | 45 | 30 | |
| | DM (dB) | 40 | 60 | 60 | 40 | 30 | |
| 20 | CM (dB) | 30 | 50 | 50 | 45 | 30 | |
| | DM (dB) | 40 | 60 | 60 | 40 | 30 | |