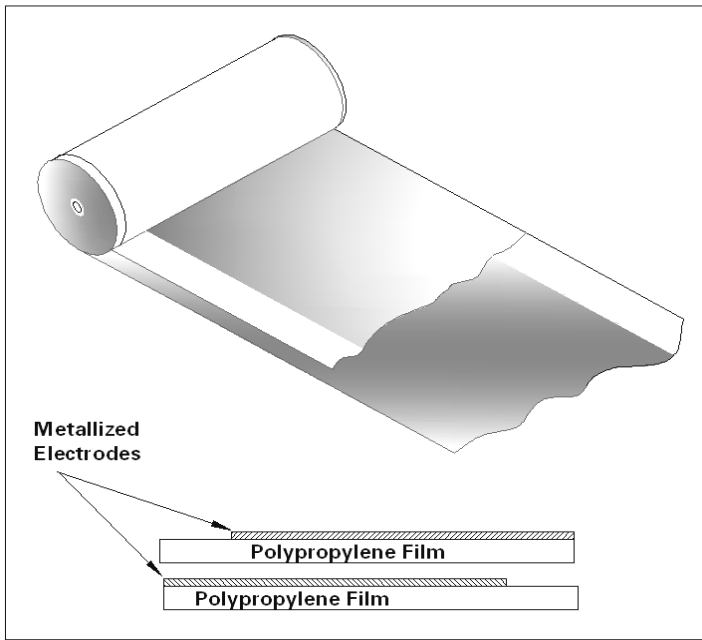


Descriptive Information

GEM III Construction

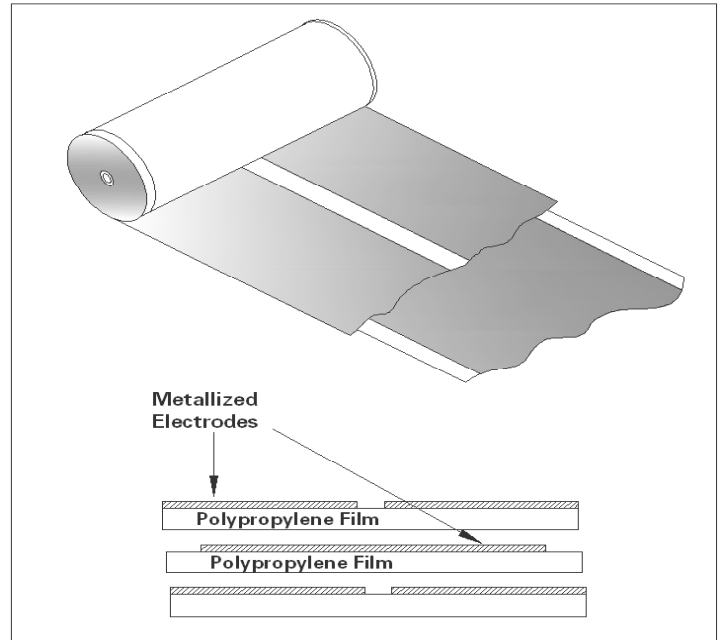


RBC 's Gem III capacitors are manufactured with high-grade metallized polypropylene film. This film is in the range of 6 to 10 microns thick, depending on the application voltage and conditions. The metallized electrode is several hundred angstroms thick.

The film is wound into capacitor rolls on high-speed, high-precision machines. The winding is extremely tight so that there is not enough space between the layers for corona (localized partial electrical discharges) to occur. The rolls are sprayed on both ends with metal to make connection to the extremely thin edges of the metallized electrodes.

The rolls are assembled in metal cases, RBC's proprietary Dielektrol VI liquid is introduced under vacuum, and the capacitors are sealed. They are then subjected to 100% electrical testing for capacitance, dissipation factor, and high potential electrical withstand, both terminal-to-terminal and terminal-to-case.

GEM III Series Construction



RBC 's Gem III capacitors are manufactured with high-grade metallized polypropylene film. This film is in the range of 6 to 10 microns thick, depending on the application voltage and conditions. The metallized electrode is several hundred angstroms thick.

The film is wound into capacitor rolls on high-speed, high-precision machines. The winding is extremely tight so that there is not enough space between the layers for corona (localized partial electrical discharges) to occur. The rolls are sprayed on both ends with metal to make connection to the extremely thin edges of the metallized electrodes. This process is critical to the quality and performance of the capacitors.

The rolls are assembled in metal cases, RBC's proprietary Dielektrol VI liquid is introduced under vacuum, and the capacitors are sealed. They are then subjected to 100% electrical testing for capacitance, dissipation factor, and high potential electrical withstand, both terminal-to-terminal and terminal-to-case.

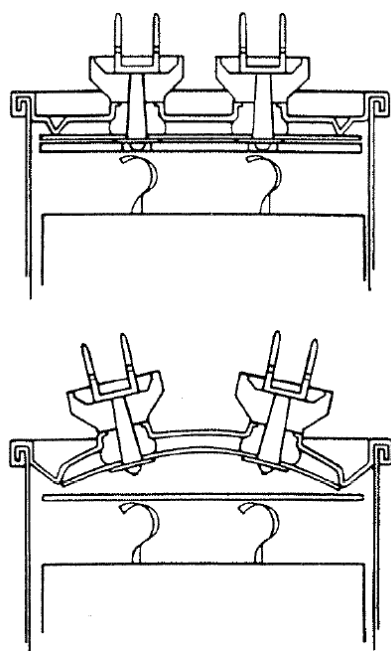
Pressure Sensitive Interrupter

All the capacitors listed in this publication contain RBC's Pressure Sensitive Interrupter (PSI). This device, developed by RBC, is designed to sense the build-up of pressure within the capacitor if a fault occurs and to interrupt the internal electrical connections before the case can rupture.

The PSI carries U.L. * recognition for applications where the specified fault currents are not exceeded. The fault current is the maximum current that is available from the circuit to flow through the capacitor if the capacitor were to become a short circuit with zero impedance. **It is the responsibility of the capacitor user to determine what the available fault current is for a particular application.**

In the Catalog Number listings a four character U.L. Code, Pxxx, is given. This number is part of the listing for RBC in U.L. File No. E7793. When applying to U.L. for approvals or recognition of equipment using these capacitors refer to the Pxxx number and not the Catalog Number of the capacitor in question.

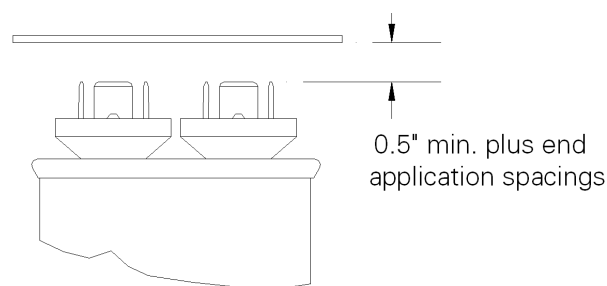
Proper operation of the PSI requires that the cover be able to expand without restriction. The following mounting considerations should be noted in mounting these capacitors.



*Underwriter's Laboratories

Vertical Clearance

There must be sufficient clearance between the tops of the terminals (and/or the assembled wire connectors) and a plane perpendicular to the capacitor terminals. This clearance must be at least 0.5 inches plus the electrical spacing requirements of the end application.



Cut-Out Clearance

In certain instances capacitors are mounted with the top of the capacitor case resting against the chassis and the terminals protruding through the chassis. Care must be taken to see that the cutout in the chassis is large enough. The following dimensions are recommended.

| Case Style | a | b | Case Style | a |
|------------|------|------|------------|------|
| A | 2.00 | 1.00 | P | 1.62 |
| B | 2.25 | 1.25 | S | 1.88 |
| C | 2.50 | 1.62 | T | 2.38 |
| D | 3.25 | 1.62 | | |

