



## Film vs. Electrolytic Comparison Advantage

CHARACTERISTIC	ELECTROLYTIC	FILM
CAPACITANCE DENSITY	√ 3X FILM	
ESR		√ 1/10 OF ELECTROLYTICS
RIPPLE CURRENT		√ 2X ELECTROLYTIC
VOLTAGE	550VDC MAX	√ UP TO 1500VDC
OVERVOLTAGE CAPABILITY	50V SURGE	√ 1.5 X RATED
FAILURE MODE	RUPTURE/SHORT	√ OPEN CIRCUIT
CONSTRUCTION	LIQUID OR GEL CAN LEAK	√ DRY
POLARITY	POLARIZED DC ONLY	√ NONPOLARIZED
HIGH ENERGY HIGH CAPACITANCE SYSTEMS	√ 5 TO 10 CENTS/JOULE	20 TO 50 CENTS/JOULE
HIGH RIPPLE CURRENT SYSTEMS	\$3/AMPERE	√ \$1/AMPERE
UPS AND MOTOR DRIVES	√	
THREE PHASE SYSTEMS		√
LIFE EXPECTANCY	6,000 TO 78,000HRS	√ 200,000HRS
TEMPERATURE RISE		√ RUN COOLER
LOW TEMPERATURE CHARACTERISTICS	BIG CAPACITANCE CHANGE AT LOW TEMPERATURES	√ TO -40°C
SHELF LIFE	2000HRS NEEDS RECONDITIONING	√ UNLIMITED
LEAKAGE CURRENT		√ ?
DRIFT		√
MULTIPLE CAPACITOR CONFIGURATIONS	ELECTROLYTICS NEED BALANCING RESISTORS	√ NO RESISTORS NEEDED