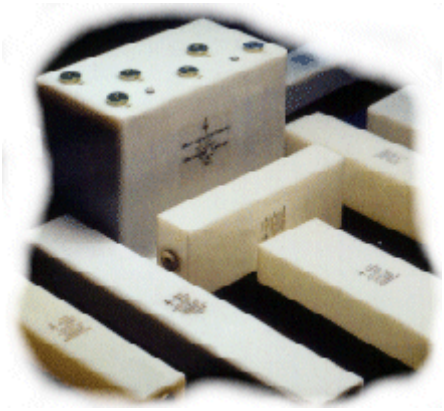
Hivolt Capacitors Limited
Maydown Industrial Estate, Derry
N. Ireland BT47 6UQ

PPR



The PPR range of capacitors are manufactured using a mixed dielectric material that consists of polyester/polypropylene film and capacitor tissue. They are impregnated and filled with a mineral oil. The container is a robust rectangular Polypropylene case. The internal construction is designed to prevent movement when the capacitor is subjected to mechanical shock or vibration. An inert welding process ensures hermetic sealing. Standard terminations are M10 threaded inserts which eliminates the necessity for large voltage terminals. The case has an extremely low affinity for moisture and is resistant to virtually all electrical environments. Brackets can be welded on as required.

Note: The impregnant used is a non toxic highly refined, purified and inhibited mineral oil.

Applications: The PPR range is designed specifically for DC applications such as filters, bypass, coupling, rapid discharge, pulse forming networks and high voltage power supplies such as those found in radar, laser and X-ray equipment. They are particularly suited for use in portable equipment.

Capacitance Range: 0.002µF - 100µF. The tolerance is +/-10%. Other tolerances are available on request. Nominal values measured at 1kHz.

Temperature Range: -40°C to 85°C. The nominal voltage rating is applicable from -55°C to 85°C. Derating is required for higher operating temperatures.

Temperature Coefficient: Capacitance will increase by 2% per 100°C temperature change.

Voltage Range: 1kVDC - 300kVDC

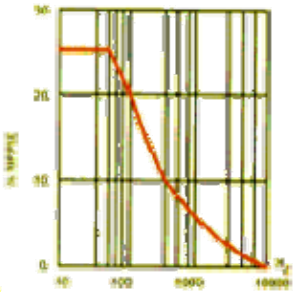


Fig 1.

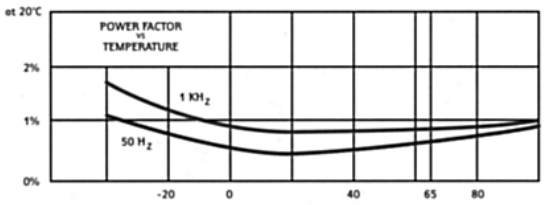
Ripple: The sum of the peak ripple voltage and the DC voltage should not exceed the rated voltage. Refer to graph fig 1 for permissible peak-to-peak ripple voltage as a percentage of rated voltage for various frequencies.

Test Voltage: V Test

For DC rating <20kV: V Test = 2.0 x Rated Voltage for 1 minute.

For DC rating >20kV: V Test = 1.5 x Rated Voltage for 1 minute.

Fig 2



Power Factor: Variable; function of temperature and frequency. See fig 2. Nominal value: < 0.5% at 20°C.

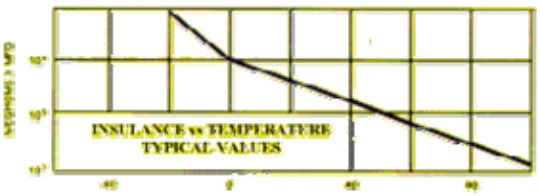


Fig 3

Dieletric Resistance: (Parallel resistance) Indicated by the graph of insulance (Mohms x µF) vs Temperature (fig 3). The insulance (Mohms x µF) is nominally 10000s at +20°C. (Measurements taken after 1 minute with an applied voltage of 500V).

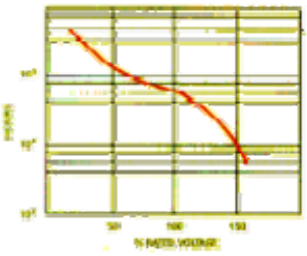
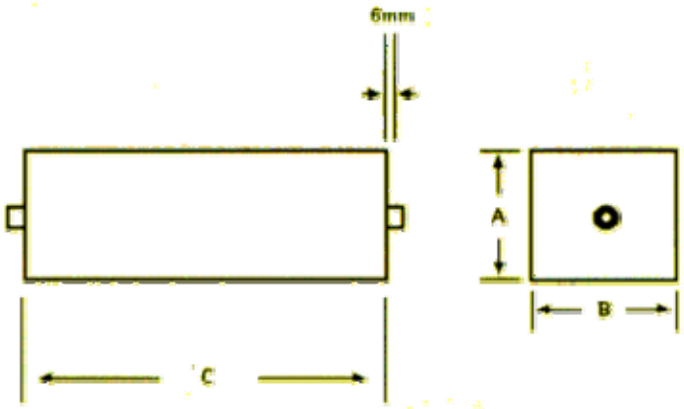


Fig 4

Life expectancy: PPR type capacitors are designed for a life expectancy of 50000 hours at 65°C. To achieve the same life expectancy at 85°C derate 60% of rated voltage (fig 4).



Custom designed capacitors are available to meet your specific application. Please complete and return our :-

CAPACITOR APPLICATION QUESTIONNAIRE.

Examples From Product List - Details of other values on request.

PART No.	Cap µF	DC Kilo-	A	B	C

		Volts			
PPR150-104	0.1	15	75	75	142
PPR200-504	0.5	20	100	130	200
PPR300-504	0.5	30	130	220	185
PPR320-104	0.1	32	110	110	180
PPR350-104	0.1	35	90	100	190
PPR350-204	0.2	35	110	120	218
PPR350-504	0.5	35	110	130	440
PPR400-304	0.3	40	110	150	320
PPR450-254	0.25	45	100	130	380
PPR500-103	0.01	50	70	90	245
PPR500-104	0.1	50	115	130	275
PPR500-504	0.5	50	175	235	280
PPR600-403	0.04	60	90	100	235
PPR650-104	0.1	65	110	120	318
PPR750-503	0.05	75	80	110	365
PPR750-104	0.1	75	115	130	365
PPR750-254	0.25	75	175	190	365
PPR1000-253	0.025	100	80	90	420
PPR1000-403	0.04	100	120	200	285
PPR1000-104	0.1	100	125	175	445
PPR1500-103	0.01	150	90	100	340
PPR1500-203	0.02	150	90	100	560
PPR2000-502	0.005	200	90	90	385
PPR3000-252	0.0025	300	70	95	555

DIMENSIONS IN MILLIMETRES +/- 1mm