

## Features

- Extremely low leakage current
- Extremely low ESR
- High pulse power

## Applications

- More than 100mA from milli-sec to several-min
- Bar-cord scanner, GPS/GPRS Wireless modem
- Digital camera, Container Tracking System

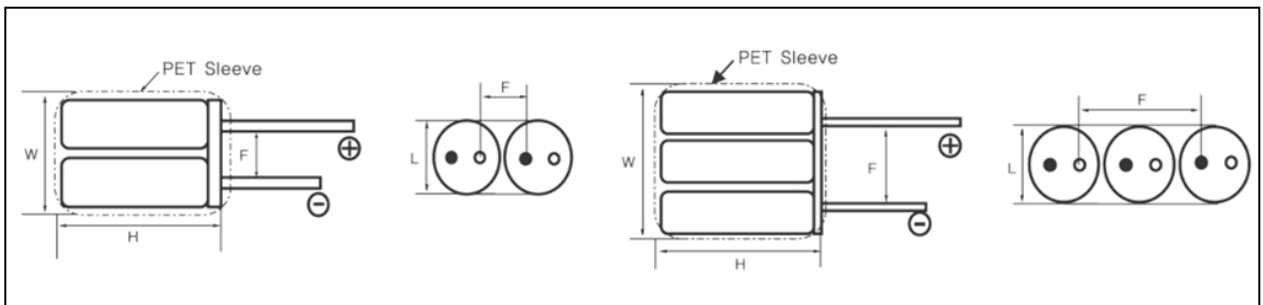


## Specifications

Items	Characteristics			
Rated working voltage	5.0 VDC		7.5 VDC	
Operating temperature	-25 to +70°C	-40 to +65°C	-25 to +70°C	-40 to +65°C
Nominal Cap. range	0.5F to 4.0F		0.5F to 2.5F	
Capacitance tolerance	-20% to +40%(at 25°C)			
Endurance	After 1,000 hours Application of rated DC working voltage at +65/70°C, the capacitor shall meet the following limits. <ul style="list-style-type: none"> <li>• Capacitance change : <math>\leq 30\%</math> of initial value</li> <li>• Internal resistance change : <math>\leq 100\%</math> of spec. value</li> </ul>			
Projected Cycle Life*	500,000 Cycles			
	1 Cycle : Charge-Discharge between $V_{rated}$ and $1/2V_{rated}$ <ul style="list-style-type: none"> <li>• Capacitance change : <math>\leq 30\%</math> of initial value</li> <li>• Internal resistance change : <math>\leq 100\%</math> of spec. value</li> </ul>			
Shelf life	2 Years (Storage in Operating temp. range above for each products without electrical load) <ul style="list-style-type: none"> <li>• Capacitance change : <math>\leq 10\%</math> of initial value</li> <li>• Internal resistance change : <math>\leq 50\%</math> of initial value</li> </ul>			

\* Cycle life varies according to the condition of application i.e. charge-discharge condition including current, temperature, voltage range and etc.

## Shape of Standard Product



## Standard products

Part Number	Operating Voltage (V)	Operating Temperature	Capacitance (F)	ESR ( $\Omega$ , @1kHz)	W x L x H (mm)	F (mm)
HPMH 5R0 504	5.0V	-25 ~ 70°C	0.5	$\leq 0.250$	16.5 X 8.0 X 21.0	5.2/12.5
HPMH 5R0 105			1.0	$\leq 0.220$	16.5 X 8.0 X 26.0	5.2/12.5
HPMH 5R0 155			1.5	$\leq 0.180$	20.5 X 10.0 X 21.0	5.3
HPMH 5R0 205			2.0	$\leq 0.150$	20.5 X 10.0 X 26.0	5.3
HPMH 5R0 255			2.5	$\leq 0.100$	25.5 X 12.5 X 21.0	7.0
HPMH 5R0 405			4.0	$\leq 0.070$	25.5 X 12.5 X 26.0	7.0
HPML 5R0 504		-40 ~ 65°C	0.5	$\leq 0.100$	16.5 X 8.0 X 21.0	5.2/12.5
HPML 5R0 105			1.0	$\leq 0.090$	16.5 X 8.0 X 26.0	5.2/12.5
HPML 5R0 155			1.5	$\leq 0.070$	20.5 X 10.0 X 21.0	5.3
HPML 5R0 205			2.0	$\leq 0.060$	20.5 X 10.0 X 26.0	5.3
HPML 5R0 255			2.5	$\leq 0.058$	25.5 X 12.5 X 21.0	7.0
HPML 5R0 405			4.0	$\leq 0.048$	25.5 X 12.5 X 26.0	7.0
HPMH 7R5 504	7.5V	-25 ~ 70°C	0.5	$\leq 0.380$	25.0 X 8.0 X 21.0	14.0
HPMH 7R5 754			0.75	$\leq 0.350$	25.0 X 8.0 X 26.0	14.0
HPMH 7R5 105			1.0	$\leq 0.280$	31.0 X 10.0 X 21.0	17.0
HPMH 7R5 155			1.5	$\leq 0.160$	38.5 X 12.5 X 21.0	20.5
HPMH 7R5 255			2.5	$\leq 0.110$	38.5 X 12.5 X 26.0	20.5
HPML 7R5 504		-40 ~ 65°C	0.5	$\leq 0.150$	25.0 X 8.0 X 21.0	14.0
HPML 7R5 754			0.75	$\leq 0.140$	25.0 X 8.0 X 26.0	14.0
HPML 7R5 105			1.0	$\leq 0.125$	31.0 X 10.0 X 21.0	17.0
HPML 7R5 155			1.5	$\leq 0.085$	38.5 X 12.5 X 21.0	20.5
HPML 7R5 255			2.5	$\leq 0.075$	38.5 X 12.5 X 26.0	20.5

Note : It is not allowed to go through reflow (IR, Atmosphere heating methods etc.) process