

Series: PC

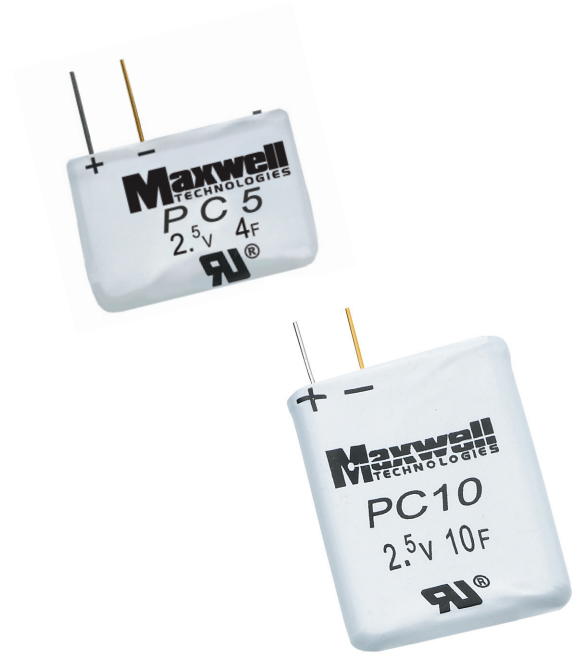
Prismatic, solder lead type

› **Features:**

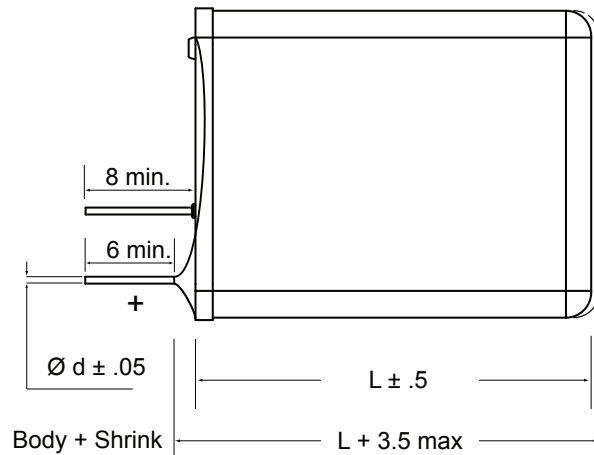
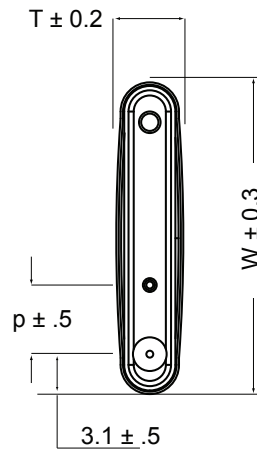
- › Over 500,000 duty cycles
- › 10 year life capability
- › Hermetically sealed, stainless steel construction
- › Low profile prismatic design
- › Higher energy vs. electrolytic
- › Higher power vs. batteries
- › UL recognized
- › RoHS compliant
- › NASA space qualified

› **Applications:**

- › Automatic meter readers
- › Automotive subsystems
- › Back up power for soft shut down requirements
- › Digital cameras and consumer electronics
- › Wireless transmissions



› **Dimensions**



Case Size	Dimensions in millimeters					Weight [g]	Vol. [l]	Typical package qty.
	L	W	T	d	p			
PC5	14	23.6	4.8	0.5	5.1	4	0.0015	500
PC10	29.6	23.6	4.8	0.5	5.1	6.3	0.003	1920

Product dimensions and specifications may change without notice. Please contact Maxwell Technologies directly for any technical specifications critical to application.

› **PC Series Specifications:**

	Product Specification			
	PC5	PC10	Tolerance	Standard
Mounting	Solder			
Capacitance CR [F]	4	10	± 20%	
Voltage, UR	2.5			
Internal Resistance, DC [ohm]	0.4	0.18	± 25%	
Internal Resistance 1kHz [ohm]	0.29	0.13	± 25%	
Rated Current [A]	1	2.5		5s discharge to ½ UR
Short Circuit Current, Isc [A]	8	19		Caution, current possible with short circuit from UR
Leakage Current [mA]	0.02	0.04		72 hrs, 25°C. Initial leakage current can be higher
Operating Temp. Range [C]	-40° - 70°			
Storage Temp Range [C]	-40° - 85			
Endurance, Capacitance [F]	< 20% decrease			1000 hrs @ UR and 70°C
Endurance, Resistance [ohm]	< 40% increase			
maximum Energy, Emax [mAh]	2.7	6.9		Full discharge from UR
Power, Pd [W/kg]	470	660		See additional technical information
Power, Pv [W/l]	1250	1390		See additional technical information
Life Time	ΔC <20% decrease, ESR < 100% increase			From initial value after 10y @25°C
Cycle Life	ΔC <20% decrease, ESR < 100% increase			From initial value after 500k cycles @ 25°C (I=0.5A) Cycle defined as nominal charge to half charge states cycle.

› **Markings: Capacitors are marked with the following information**

Rated capacitance, rated voltage, product number, name of manufacturer, positive and negative terminal, warning marking, UL mark.

› **Mounting Recommendations:**

All components are tinned with 1.5mm of capacitor body. It is recommended that parts stay within protective packaging until ready to use. Parts may be soldered or wave soldered. Request supplemental information related to mounting instructions if necessary.

Components should not be operated outside recommended limits.

› **Additional Technical Information:**

$$P_d = (0.12 \times E^2 / R_d) / M \quad \text{Where } E = \text{charge voltage (UR)}$$

$$M = \text{capacitor weight (kg)}$$

$$R_d = \text{internal resistance (DC)}$$

$$P_v = (0.12 \times E^2 / R_d) / V \quad \text{Where } V = \text{capacitor volume (L)}$$

US Patents: 5,621,607; 5,777,428; 5,862,035; 5,907,472; 6,233,135; 6,449,139

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