

Prismatic, solder lead type

Series: PC



> Features:

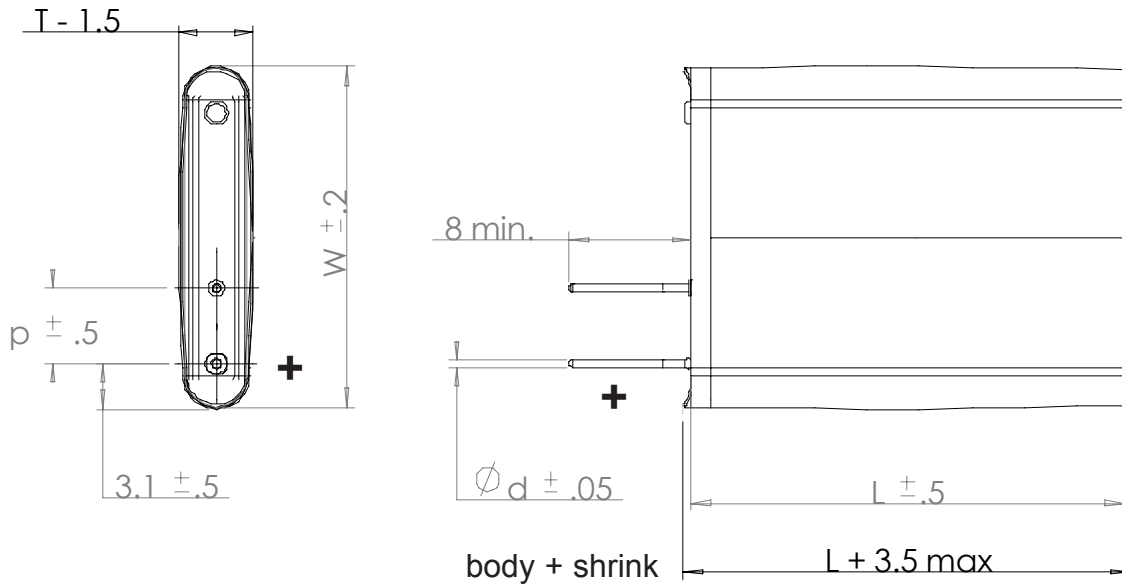
- > Over 500,000 duty cycles
- > 10 year life capability
- > Hermetically sealed, stainless steel construction
- > Low profile prismatic design
- > Higher energy vs electrolytic
- > Higher power vs. batteries
- > UL recognized

> Applications:

- > Automatic meter readers
- > Automotive subsystems
- > Back up power for soft shut down requirements
- > Digital cameras and other consumer electronics
- > Wireless transmissions
- > NASA space qualified



> Dimensions:



Case size	Dimensions, mm					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	500

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

› **Specifications:**

	Product Specification			
	PC5	PC10	Tolerance	Standard
Mounting	Solder			
Capacitance, C _R [F]	4	10	+/- 20%	
Voltage, U _R	2.5			
Internal resistance, DC [ohm]	0.4	0.18	+/- 25 %	
Internal resistance, 1 kHz [ohm]	0.29	0.13	+/- 25 %	
Rated current, [A]	1	2.5		5s discharge to 1/2 U _R
Short circuit current, I _{sc} [A]	8	19		Caution , current possible with short circuit from U _R
Leakage current [mA]	0.02	0.04		72 hrs, 25°C
Operating temp. range [C]	-40 to 70			
Storage temp. range [C]	-40 to 85			
Endurance, Capacitance [F]	< 20% decrease			1000 hrs @ U _R and 70°C
Endurance, Resistance [ohm]	< 40% increase			
Maximum energy, E _{max} [mAh]	2.7	6.9		Full discharge from U _R
Power, P _d [W/kg]	470	660		See additional technical information
Power, P _v [W/l]	1250	1390		See additional technical information
Life Time	ΔC < 20% decrease, ESR < 200% increase			from initial value after 10y @ 25°C
Cycle Life	ΔC < 20% decrease, ESR < 200% increase			from initial value after 500K cycles @ 25°C (I = 0.5A)

› **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 to within 1.5 mm of capacitor body. It is recommended that parts stay within protective packaging until ready for use. Parts may be hand soldered or wave soldered. Request supplemental information related to mounting instructions if necessary.

Components should not be operated outside recommended limits.

› **Additional Technical Information:**

$$P_d = (0.12 \times E^2 / R_d) / M \quad \text{where } E = \text{charge voltage (U}_R\text{), } R_d = \text{internal resistance (DC)}$$

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

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

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

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