Round, solder lead type

Series: BCAP

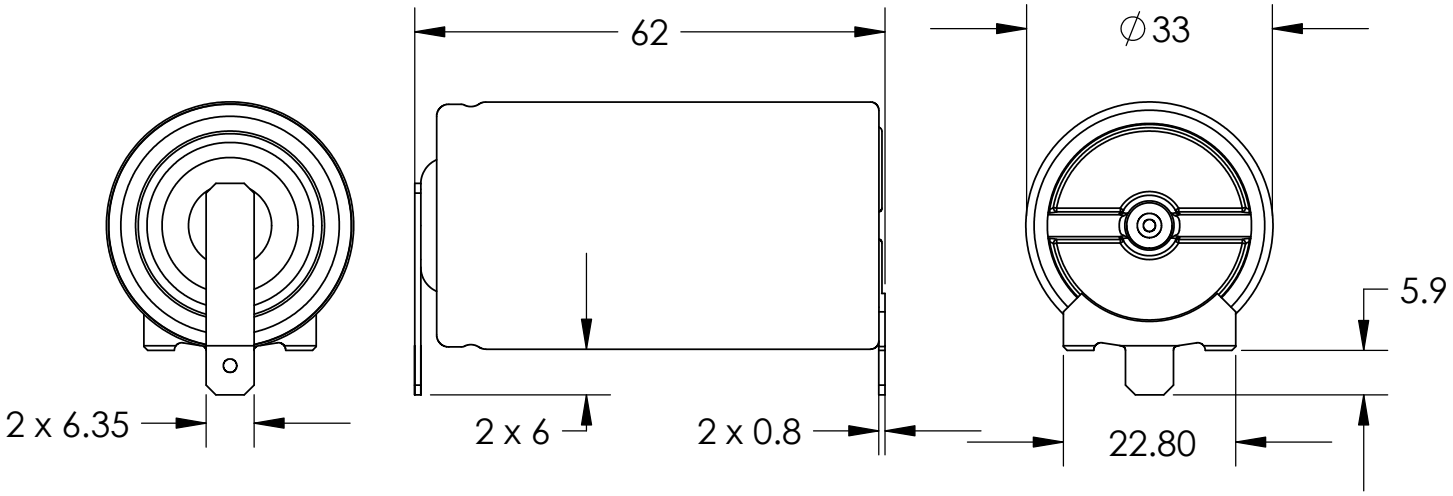
Features:

- Dimensions similar to EN 60086-2 & EN 60285
- Over 500,000 duty cycles
- 10 year life capability
- Higher energy vs. electrolytic
- Higher power vs. batteries
- Aluminum construction
- Round, double ended design
- Ultra-low internal resistance
- Resistant against reverse polarity
- UL Recognized

Applications:

- Automotive subsystems
- Heavy duty vehicle subsystems
- Rail system power
- Windmill pitch control systems
- Wireless transmissions

Dimensions:



Dimensions, mm					
Case Size	**L**	**OD**	**Weight [g]**	**Vol. [l]**	**Typical package qty.**
BCAP0350	62	33	60	0.05	40

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

› Specifications:

	Product Specification		
	BCAP0350	Tolerance	Standard
Mounting	Solder		
Capacitance, C_R [F]	350	+/- 20%	
Voltage, U_R	2.5		
Internal resistance, DC [ohm]	0.0032	+/- 25 %	Discharging at Constant Current (25°C)
Internal resistance, 1 kHz [ohm]	0.0016	+/- 25 %	
Thermal Resistance, R_{th} (^{O}C/W)	10.9		$\Delta T=DR_{th}I_c^2R_d$
Short circuit current, I_{sc} [A]	1500		**Caution,** current possible with short circuit from U_R
Leakage current [mA]	1		72 hrs, 25°C
Operating temp. range [C]	-40 to 65		
Storage temp. range [C]	-40 to 70		
Endurance, Capacitance [F]	< 20% decrease		1000 hrs @ U_R and 65°C
Endurance, Resistance [ohm]	< 25% increase		
Maximum energy, E_{max} [Wh/kg]	5.1		Full discharge from U_R
Peak Power Density, P_d [W/kg]	16,275		Matched Load
Power Density, P_d [W/kg]	3,900		See additional technical information
Life Time	$\Delta C/C_R$ < 20% decrease, ESR < 2 x increase		from initial value after 10y @ 25°C
Cycle Life	$\Delta C/C_R$ < 20% decrease, ESR < 2 x increase		from initial value after 500K cycles @ 25°C (I = 5A)

› Markings: Capacitors are marked with the following information

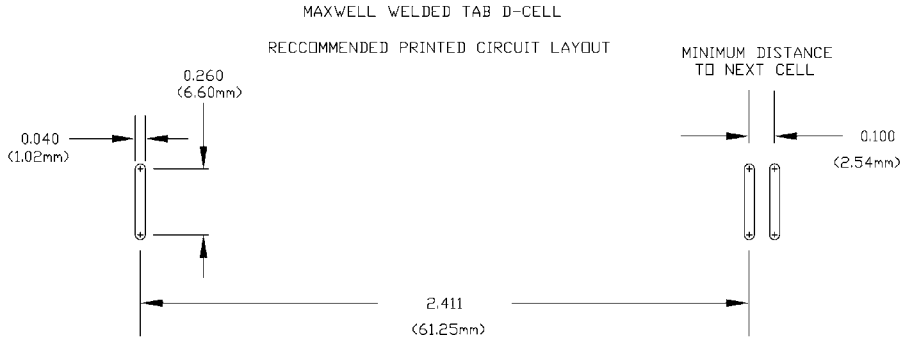
Rated capacitance, Rated voltage, product number, name of manufacturer, UL symbol, positive terminal, negative terminal and warning marking

› Mounting Recommendations:

Cells are designed to be soldered into series or parallel strings.

Components should not be operated outside recommended limits.

Parts can be ordered without tabs.



› Additional Technical Information:

$$P_d = (0.12 \times E^2/R_d)/M \qquad \Delta T=DR_{th}I_c^2R_d$$

E = charge voltage (U_R)

M = capacitor weight (kg)

D = duty cycle

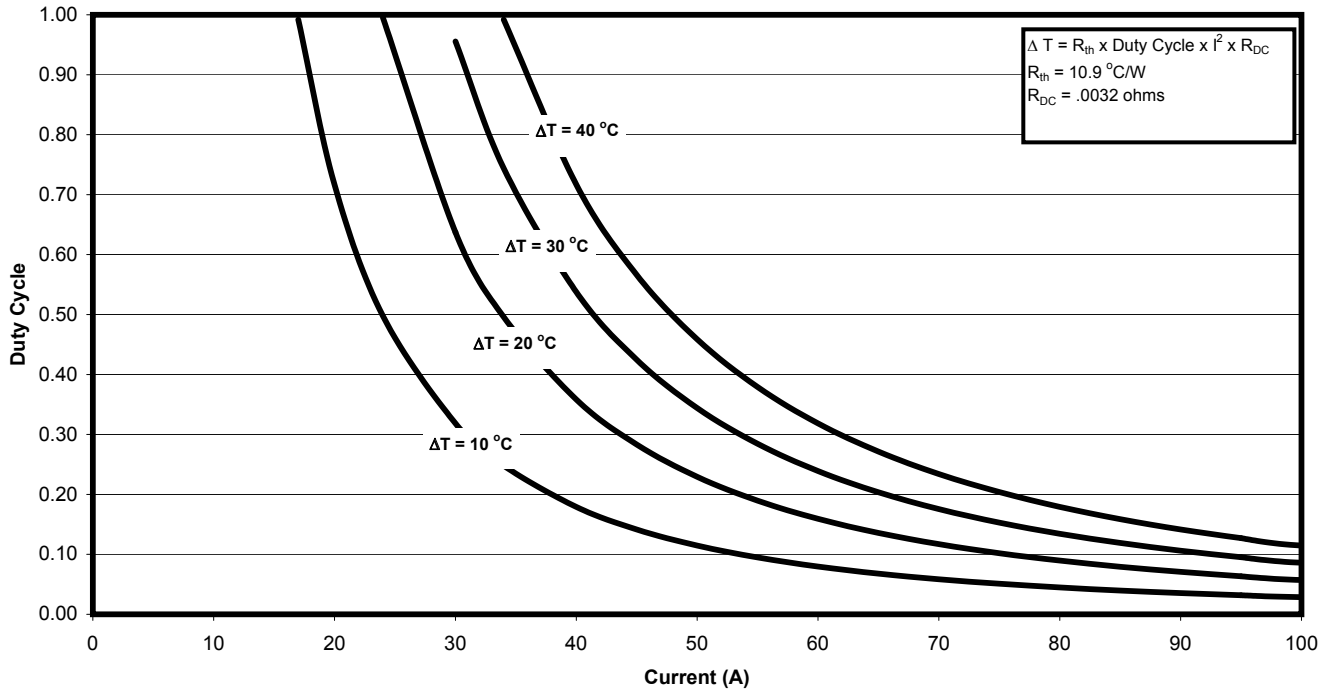
R_d = internal resistance (DC)

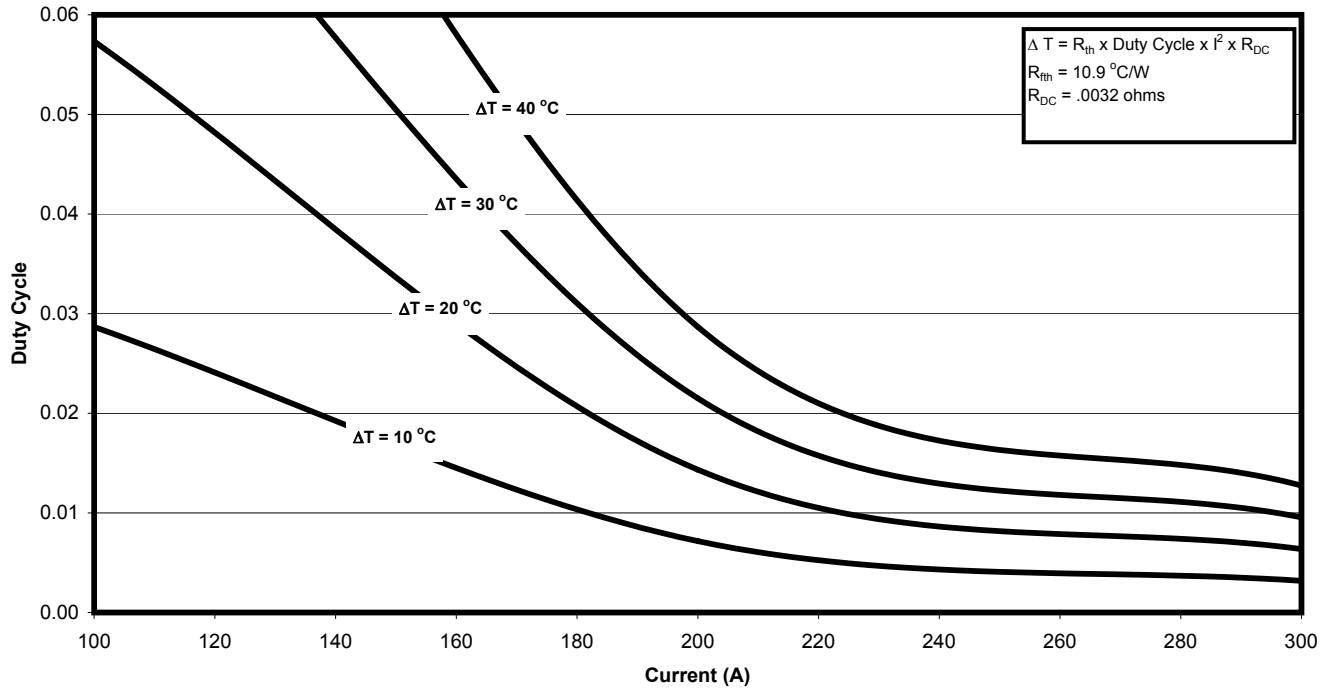
V = capacitor volume (l)

I_c= continuous current

› ΔT - duty cycle vs. operating current:

› Curves generated under free convection at 25°C ambient





Patent Pending

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