



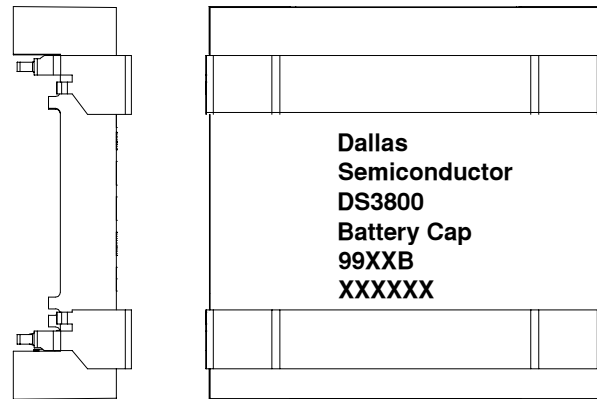
# DS3800 Advanced NV SRAM Battery Cap

[www.dalsemi.com](http://www.dalsemi.com)

## FEATURES

- Houses 400 mAh primary lithium battery
- Snaps directly onto a surface-mounted 40mm ball-grid array (BGA) Nonvolatile SRAM module
- Attaches after host BGA module has been surface-mounted to protect lithium battery from the high temperatures of reflow soldering
- Maintains mechanical and electrical connection with BGA module even during severe shock and vibration stresses
- Four attachment flanges latch onto host BGA module to provide strong, semi-permanent attachment. Flanges can be broken off for cap removal
- Industrial temperature range of  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

## PIN ASSIGNMENT



## ABSOLUTE MAXIMUM RATINGS

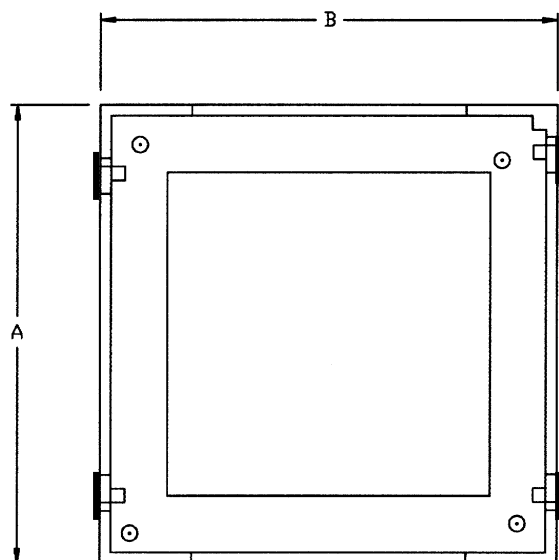
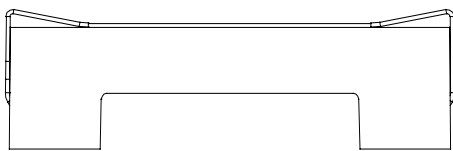
Operating Temperature	$-40^{\circ}\text{C}$ to $85^{\circ}\text{C}$
Non-Operating Temperature	$-40^{\circ}\text{C}$ to $85^{\circ}\text{C}$

## BATTERY CHARACTERISTICS

Nominal Voltage	3 volts
Nominal Capacity	400 mAh
Chemistry	Li(CF) <sub>x</sub>
Data Retention Life	8 Years ( $25^{\circ}\text{C}$ )

## DESCRIPTION

The DS3800 Battery Cap is a snap-on lithium power source for Dallas Semiconductors 40mm ball-grid array (BGA) Nonvolatile SRAM modules. After a host BGA module has been soldered in place and cleaned, the DS3800 Battery Cap is snapped onto the module to serve as the secondary power supply. The Battery Cap is keyed to prevent incorrect attachment and is designed to maintain mechanical and electrical contact with its host module even during severe shock and vibration. Electrically, the DS3800 battery is connected to the host BGA module with gold-plated round pins in the Battery Cap inserted into gold-plated receptacles on the BGA. Mechanically, four flanges on the DS3800 tightly grip the BGA module board to prevent Cap removal, while corner features in the Cap prevent lateral movement of the Cap while it is attached to its host BGA module.

**DS3800 PACKAGE DIMENSIONS**

<b>PKG DIM</b>	<b>MIN</b>	<b>MAX</b>
A IN.	-	1.670
MM	-	42.42
B IN.	-	1.705
MM	-	42.42
C IN.	-	0.505
MM	-	12.76