

# Li-SO<sub>2</sub> primary battery system

## BA 5590 High capacity

20% more capacity than regular BA 5590 B/U battery

10 LO 26 SXC cells connected in 2 groups of 5 cells in series providing 2 nominal 12 V sections at connector. These sections can be connected in series (for 24 V) in parallel (for 12 V) or used as two separate 12 V units.



### Key features

- A non-replaceable fuse is incorporated in the negative leg of each series group of cells.
- A normally closed high temperature switch or thermal fuse is incorporated into each series group of cells to protect against overheating.
- A diode is incorporated into the positive leg of each series group of cells to prevent charging or flow of current into the battery.
- A device consisting of a manually activated pull tab and resistors designed to discharge the battery to 0 V is built into the battery.

### Typical applications

- AN/PRC-104 Radio
- AN/PRC-113 Radio
- AN/PRC-117 Radio
- AN/PRC-119 Singcars Radio
- KY-57, KY-65 Encryption Set
- REMBASS Remotely Monitored Battlefield Surveillance System
- PLRS Position Locator and Reporting System
- RT-991 Buoy Radio
- RT-1175 Buoy Radio
- AN/TAS-4A TOW Night Sight

### Electrical characteristics

Typical OCV (V)	15.0 or 30.0
Nominal voltage (at 500 mA) (V)	13.5 or 27.0
Cut-off (V)	10.0 or 20.0
Typical capacity +21°C/+70°F (at 250 mA discharge current)	18.2 Ah at 12 V 9.1 Ah at 24 V
Operating temperature	-40°C to +71°C -40°F to +160°F
Storage	Recommended max Possible
	+35°C / +95°F -40°C to +71°C / -40°F to +160°F

### Physical characteristics

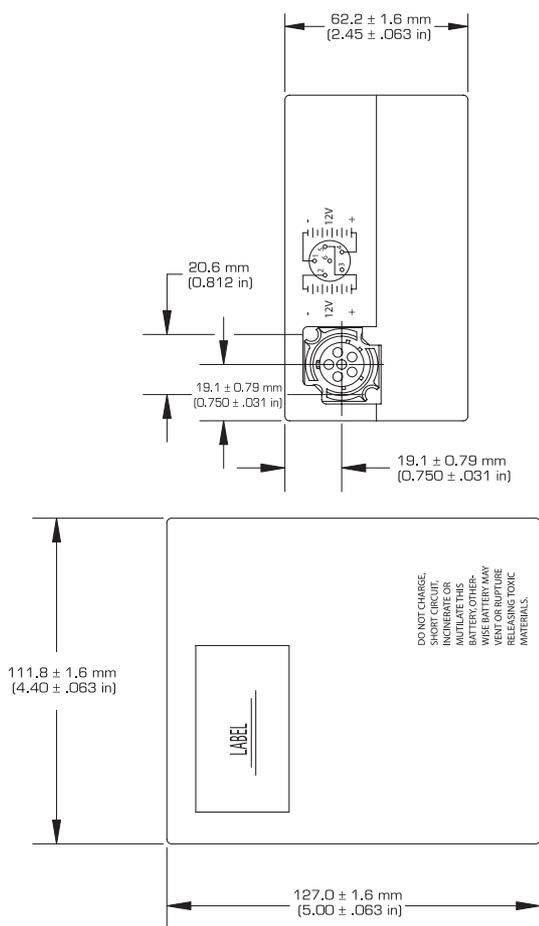
Typical Weight (g/oz)	1000 / 35.3
Weight of Li metal content (g/oz)	27 / 0.95
Width (mm/in)	62.2 / 2.45
Height (mm/in)	111.8 / 4.40
Depth (mm/in)	127.0 / 5.00
Battery Case	Plastic

### References

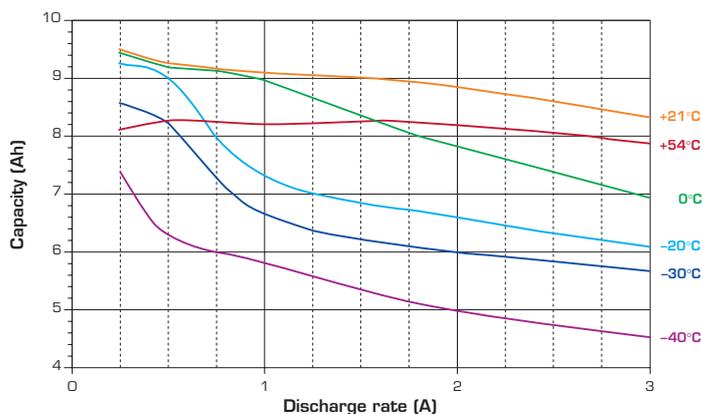
Mating connector	ITT Cannon CA 110821- 6
Reference specifications	MIL PRF 49471B or Saft Standard Specification



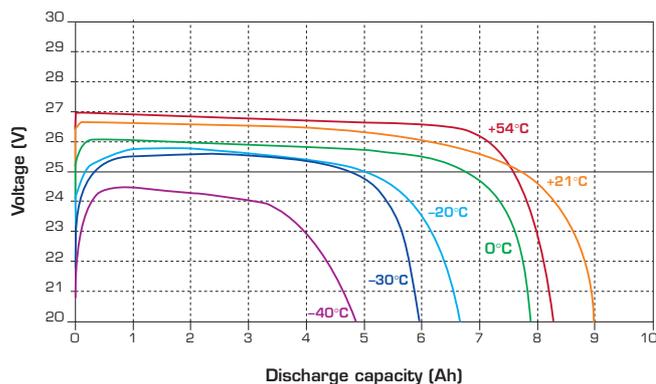
## BA 5590 HC dimensions



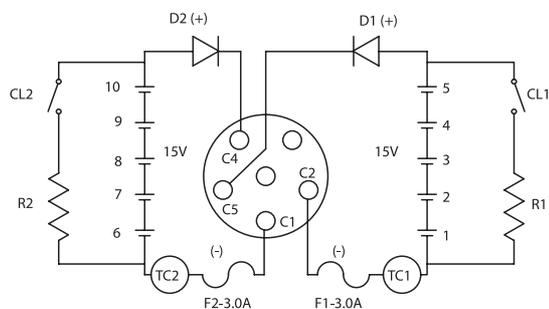
## Capacity vs rate at various temperatures



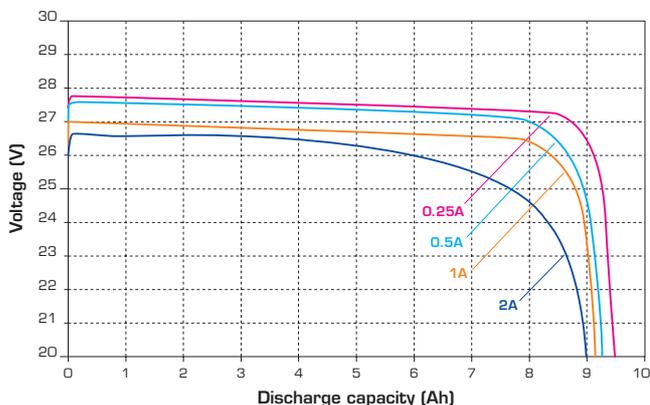
## 2 A discharge typical curves at various temperatures (24 V mode)



## Electrical schematic



## Typical discharge curves at various rates at +21°C/+70°F



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