

# Battery Package BS13A-EC400/422F

No worry about replacement due to lifetime with this capacitor package!

Lead Ni-Cd Ni-MH Other

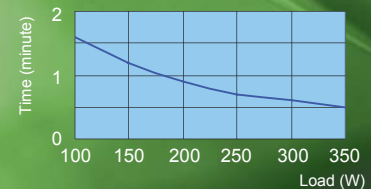
RoHS Directive

Inside view



BS13A-EC400/422F

Capacitor backup discharge characteristics  
Be aware that it is a reference value at initial use of the battery package, it is not a guaranteed value.



Model	Description	Stock
BS13A-EC400/422F		Standard stock

## Model Name Coding

**BS13 A - EC 400 / 422F**

① ② ③ ④ ⑤

1. Series name
2. Modification code
3. Electrolytic capacitor
4. Output voltage
5. Capacity 4,200μF

## Compatible Power Supply

eNSP4-500P series	p.39
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## Battery Charge/Discharge Characteristics (used with eNSP4-500P-SA0-H1V)

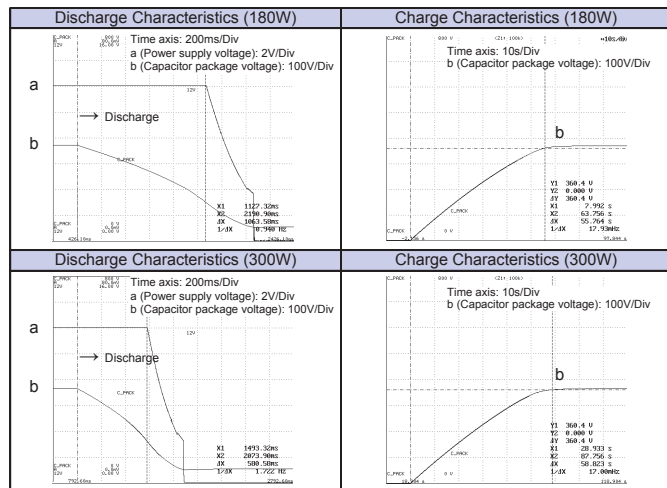
Be aware that it is a reference value at initial use of the battery package, it is not a guaranteed value.

(Examples of actual measurement)

## Features

By using electrolytic capacitors, instead of a battery package, the unit has 12 years min. (at 40°C) life expectancy. No need for maintenance.

- Advantages of a capacitor package
  - Maintenance free (no need for replacement)
  - Low and high temperature (0°C to 60°C)
  - 2 minutes quick charge (deals with frequent blackout)
  - Light 1.4kg typ. (approximately half the weight as compared to our 5-inch bay embedded type)

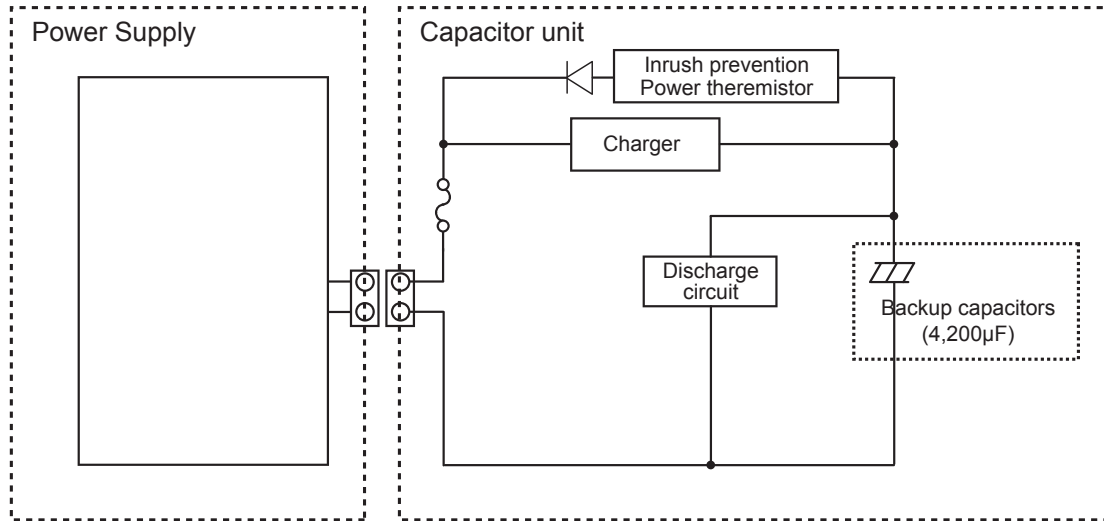


## General Specification Condition: at normal temperature and humidity unless otherwise specified

Items	Specification	Measurement condition, etc.
Capacitor	400V 150μF (28 connected in parallel)	
Nominal Capacitor Capacity	4200μF	
Embedded Fuse Rating	250V 6.3A	Do not replace fuse
Operating Temp. / Humidity	0 to 60°C / 20 to 90%	No condensation
Storage Temp. / Humidity	-20°C to 70°C / 10 to 95%	No condensation
Weight	2 kg max.	
Capacitor Charge Current	20mA typ.	Rated current charge
Capacitor Charge Time	120 sec max.	Time the capacitor reaches 360V after AC input of the power supply is turned on.
Self-discharge Time	200 sec max.	Time the capacitor charge decreases to 30V in the case that the connector with the power supply goes open at full charge.
Charge Lamp	30V min.	If capacitor voltage is 30V or more, red LED turns on.
Vibration	Displacement amplitude: 0.15mm (10-55Hz), Sweep cycles: 10, Test duration: 45 minutes each axis	JIS-C-60068-2-6, at no operation
Mechanical Shock	Acceleration of 150m/s <sup>2</sup> for 11ms one time each in the X, Y and Z directions. No malfunction, damage, loosening or coming-off	JIS-C-60068-2-27, at no operation
Insulation Resistance	Input - FG: 100MΩ min.	At 500 VDC
Dielectric Strength	Input - FG: 1500 VDC for 1 minute	It can be shortened to 1.8kV/s, current: 10mA max.
Reliability Grade	FA (industrial equipment grade, double-sided through hole PCB)	Follow our standard
MTBF	500,000H min.	
Life Expectancy*	12 years min.	Environmental temperature: 40°C
Warranty	3 years after delivery. If any faults belong to us, the defective unit shall be repaired or replaced at our cost.	Except for errors caused by operation not listed

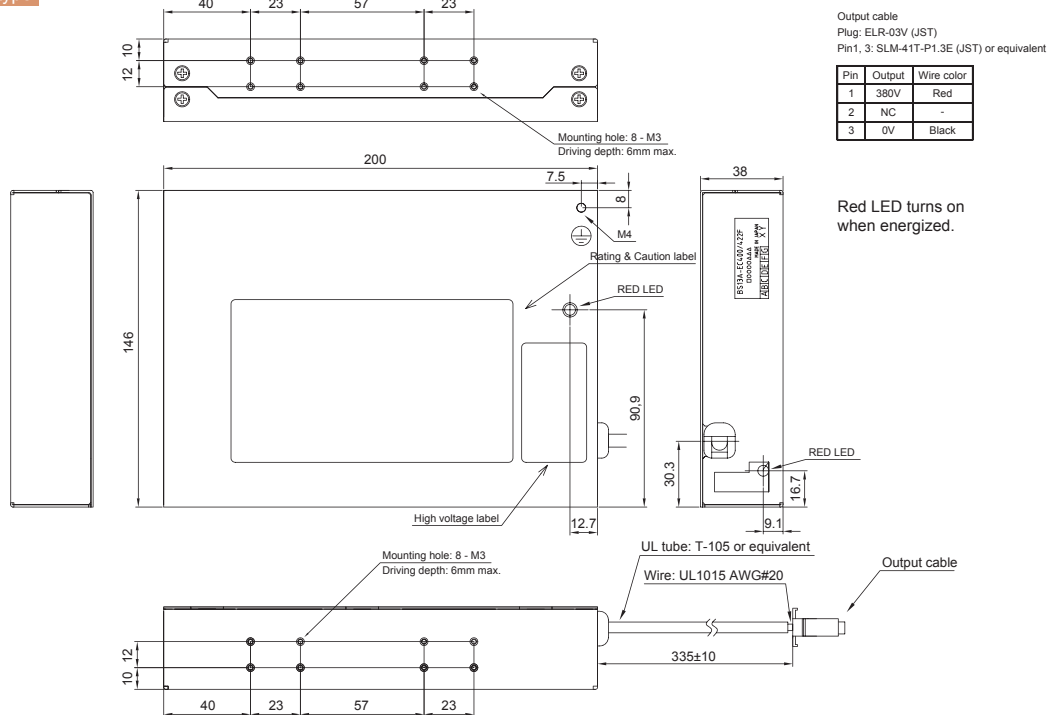
\* Life expectancy is a reference value. It is not a guaranteed value.

## Block Diagram



## Outline Drawing

5-inch bay fixed type



## Q&A

Question	Answer
Is there a limit for installation direction?	No. BS13A-EC400/422F can be installed in any directions.
120 sec seems too long for a charge time. What is it for?	Since there are as many as 28 electrolytic capacitors embedded, 120 sec charge time is provided to prevent damage to the components caused by inrush current.