

# SPECIFICATION FOR APPROVAL

**Model:** MCP0300C0-0028R5SHZ  
**File Number:** JX-YF-S-182.E  
**File Version:** V2017-1

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## Features

- Over 1,000,000 duty cycles
- High power density
- Low ESR

## Applications

- Heavy duty vehicles engine start

## Specification



### ELECTRICAL

MCP0300C0-0028R5SHZ

Nominal Capacitance	300 F
Capacitance Tolerance	0% / +20%
Cold Cranking Amps	1100 CCA
Peak Power	50.7 kW
Input voltage (B+ terminal)	18 V-30 V
Output voltage	28.5 V
Current draw (on batteries)	25 A max. (from battery when charging) < 10 mA

### Environment

Operating Temperature Range	-40°C to +65°C
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### PHYSICAL

Weight	13.3 kg
Power Terminals	Battery Pole

**LIFE**

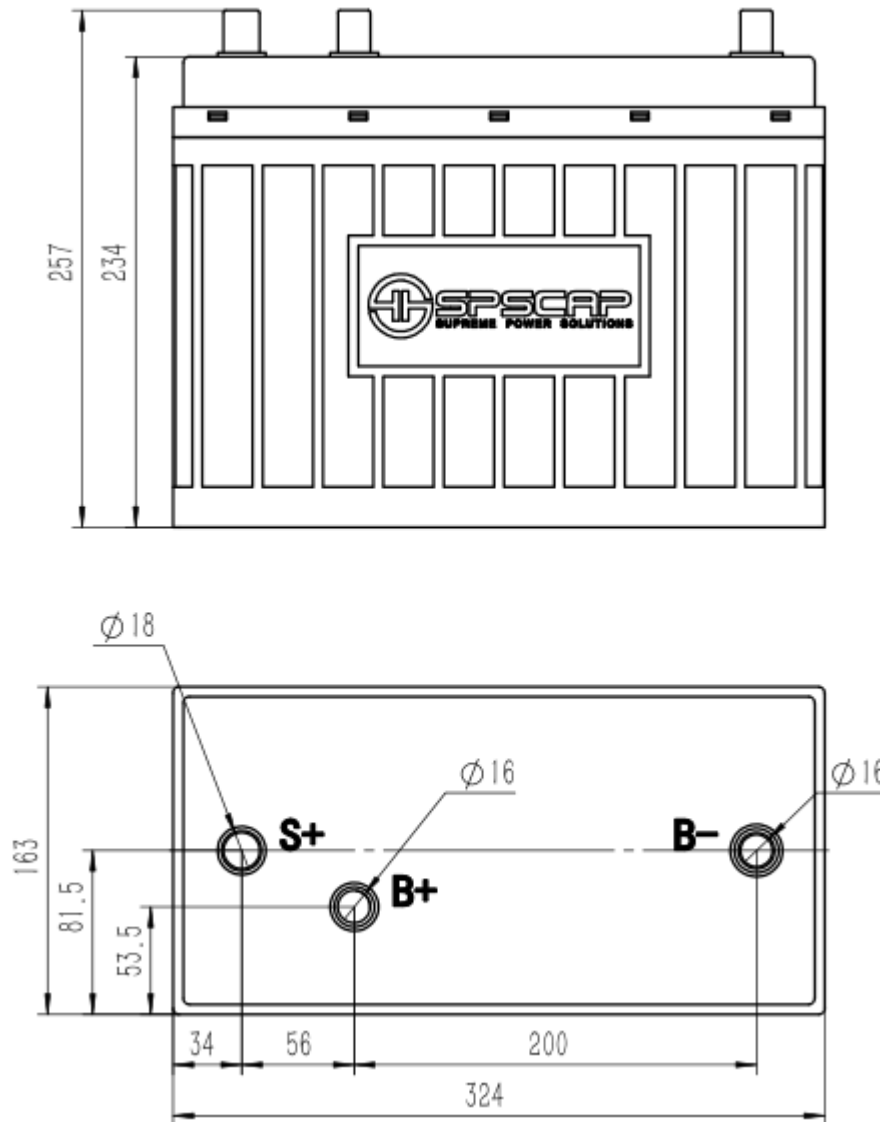
MCP0300C0-0028R5SHZ

<b>High Temperature</b>	1,500 hours
(at Rated Voltage & Maximum operating Temperature)	
<b>Capacitance Change</b>	≤20%
(% decrease from initial measured value)	
<b>ESR Change</b>	≤100%
(% increase from specified value)	
<b>Room Temperature</b>	10 years
(at Rated Voltage at 25°C)	
<b>Capacitance Change</b>	≤20%
(% decrease from initial measured value)	
<b>ESR Change</b>	≤100%
(% increase from specified value)	
<b>Cycle Life</b>	1,000,000
(Number of cycles)	
<b>Capacitance Change</b>	≤20%
(% decrease from initial measured value)	
<b>ESR Change</b>	≤100%
(% increase from specified value)	
<b>Shelf Life</b>	4 years
(25°C, uncharged)	

**SAFE**

<b>Factory High-Pot Test</b>	500 V DC
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## Dimensions



Part Number	Dimension (mm)		
	L ( $\pm 0.5$ mm)	W ( $\pm 0.5$ mm)	H ( $\pm 0.5$ mm)
MCP0300C0-0028R5SHZ	324	163	257