

ES 5-12

12V - 5Ah

INTRODUCTION

The most advanced technology of ROCKET, Valve Regulated Lead Acid batteries make them highly useful in a broad range of applications. The use of high-purity calcium alloy maximizes the longevity of ROCKET batteries to ensure excellent performance in any circumstances.

ES Series are specially designed to provide better cyclic life and are ideally suited for areas prone to frequent power failures.

The unique construction coupled with the use of special sealing epoxies and long sealing paths of ROCKET series ensures that no electrolyte leakage can occur from terminals or cases of any ROCKET Batteries. This feature ensures safe & efficient operation of ROCKET batteries in any position.

TECHNICAL FEATURES

- Non-Spillable Sealed Construction
- Absorptive Glass Mat System (AGM System)
- ABS (Acrylonitrile Butadiene Styrene) container and cover
- Micro millimeter SiO₂ and H₂SO₄ gelled electrolyte technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Maintenance-Free Operation
- Low Pressure Venting System
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Low Self-Discharge - Long Shelf Life
- Wide Operating Temperature Range

APPLICATIONS

- UPS
- Telecom Communication Equipments
- Medical Instruments
- Computer Backup
- Solar Powered Systems.

SPECIFICATION

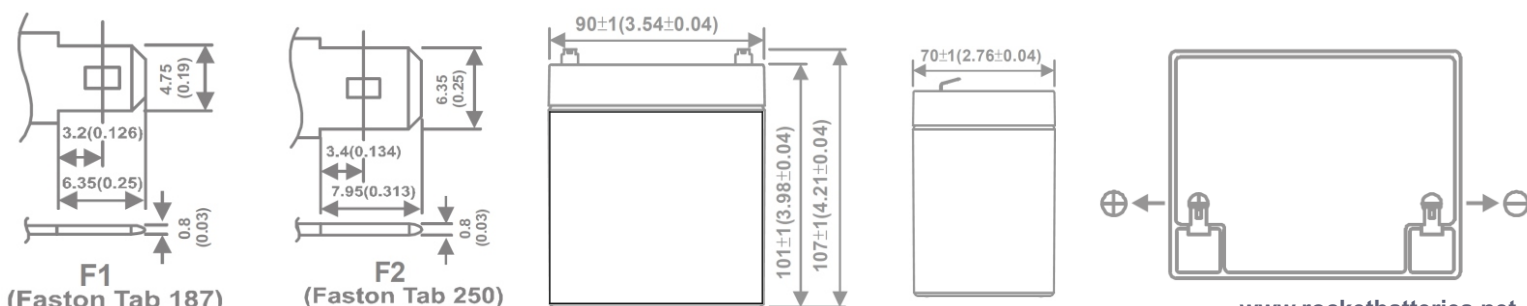
Nominal Voltage		12V
Capacity (20HR, 25°C)		5Ah
Dimension	Length	90mm (3.54inch)
	Width	70mm (2.76inch)
	Height	101mm (3.98inch)
	Total Height	107mm (4.21inch)
Approx Weight		1.62kg (3.56lbs)
Design Life		5 Years

CHARACTERISTICS

Capacity 25°C (77°F)	20 hour rate	5Ah
	10 hour rate	4.27Ah
	5 hour rate	3.82Ah
	1 hour rate	2.55Ah
Internal resistance (Fully charge, 25°C)		Approx.34.5mΩ
Self-discharge (25°C)	1 month	Remaining Capacity:97%
Operating temperature range	Discharge	-15°C~40°C
	Charge	-15°C~50°C
	Storage	-15°C~40°C
Maximum discharge current		77°F(25°C)67.5A(5 Sec.)
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use		Cycle Use 14.4 to 15.0V Temp.compensation-5.0mV/°C
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Standby Use		Standby Use 13.5-13.8V Temp.compensation-3.0mV/°C

COMPLAINTS STANDARD

- JIS
- IEC 60896 PART 1 & 2
- BS6290-4,
- Eurobat Guide - HIGH Performance



www.rocketbatteries.net

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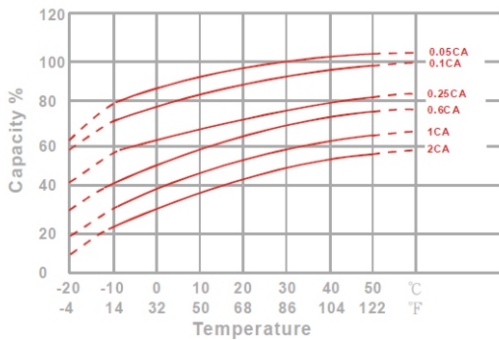
CONSTANT CURRENT DISCHARGE (Amperes) at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h
1.60V	19.4	12.1	8.74	5.26	3.05	1.69	1.28	1.02	0.878	0.515	0.276
1.65V	19.2	12.0	8.65	5.21	3.02	1.67	1.27	1.01	0.872	0.511	0.272
1.67V	19.0	11.9	8.58	5.15	2.99	1.66	1.26	1.00	0.867	0.507	0.268
1.70V	18.8	11.8	8.53	5.11	2.97	1.65	1.25	0.996	0.863	0.503	0.265
1.75V	18.3	11.6	8.31	4.97	2.89	1.62	1.23	0.973	0.852	0.495	0.257
1.80V	17.0	11.3	7.83	4.82	2.78	1.54	1.21	0.948	0.839	0.480	0.245
1.85V	14.9	10.0	7.21	4.36	2.53	1.42	1.14	0.889	0.808	0.458	0.231

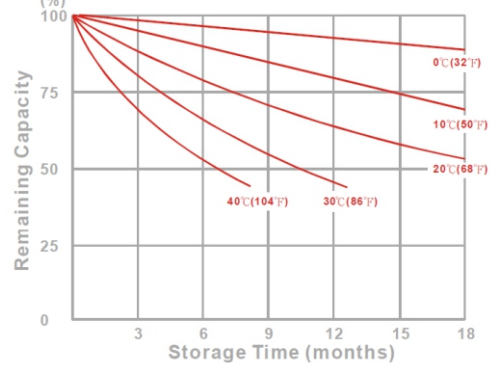
CONSTANT POWER DISCHARGE (Watts per cell) at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	10h	20h
1.60V	32.83	22.33	16.30	9.77	5.87	3.38	2.60	2.07	1.78	1.15	0.568
1.65V	31.67	21.83	16.10	9.65	5.78	3.32	2.55	2.03	1.75	1.14	0.562
1.67V	30.67	21.33	15.95	9.53	5.68	3.25	2.50	2.02	1.73	1.13	0.555
1.70V	29.83	21.00	15.82	9.43	5.62	3.20	2.47	1.98	1.72	1.12	0.552
1.75V	27.83	20.00	15.35	9.08	5.32	3.10	2.40	1.93	1.68	1.10	0.538
1.80V	25.67	18.67	14.78	8.73	4.95	2.97	2.30	1.86	1.64	1.08	0.518
1.85V	22.67	16.42	13.25	7.78	4.38	2.70	2.12	1.72	1.53	1.02	0.480

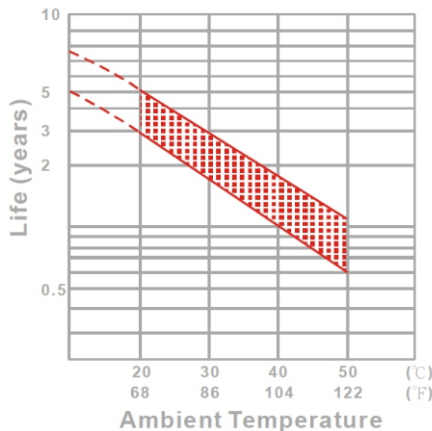
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life

