



# ES5-12SA T2

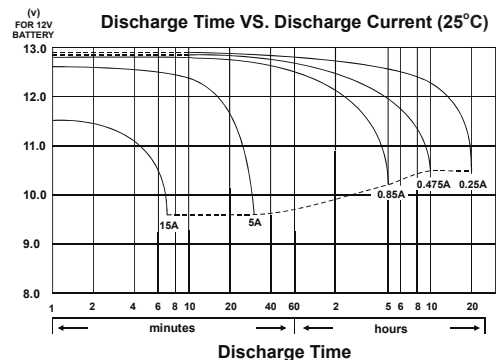
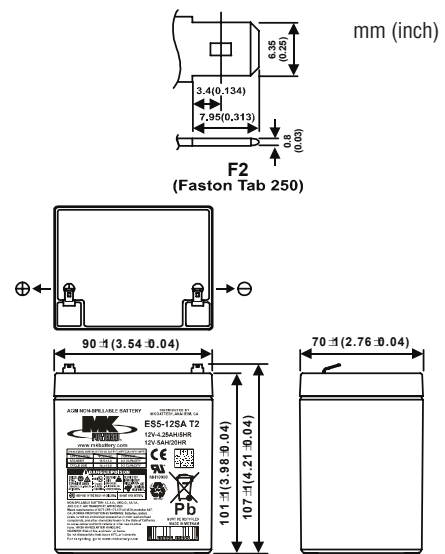
## SPECIFICATIONS

<b>Nominal Voltage (V)</b>	12V
<b>Nominal Capacity</b>	
20 hour rate ( 0.25A to 10.50V )	5Ah
10 hour rate ( 0.475A to 10.50V )	4.75Ah
5 hour rate ( 0.85A to 10.20V )	4.25Ah
1C ( 5A to 9.60V )	2.67Ah
3C ( 15A to 9.60V )	1.75Ah
<b>Weight</b>	Approx. 3.56Lbs. (1.62kg)
<b>Internal Resistance (at 1KHz)</b>	Approx. 34 mΩ
<b>Maximum Discharge Current for 5 seconds :</b>	75A
<b>Operating Temperature Range</b>	
Charge	-15°C ( 5°F ) to 40°C (104°F )
Discharge	-15°C ( 5°F ) to 50°C (122°F )
Storage	-15°C ( 5°F ) to 40°C (104°F )
<b>Charge Retention (shelf life) at 20°C ( 68°F )</b>	
1 month	92%
3 months	90%
6 months	80%
<b>Charging Methods at 25°C ( 77°F )</b>	
<b>Cycle Use :</b>	Charging Voltage 14.4 to 15.0V Coefficient -5.0mv / °C / cell Maximum Charging Current : 1.5A
<b>Standby Use :</b>	Float Charging Voltage 13.50 to 13.80V Coefficient -3.0mv / °C / cell
<b>Case Material :</b>	ABS UL94 HB
<b>Terminal :</b>	F2

## Maintenance-Free Rechargeable Sealed Lead-Acid Battery



## DIMENSIONS



## MK Battery

1631 South Sinclair Street • Anaheim, California 92806

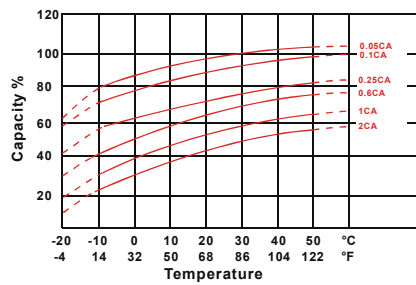
Toll Free: 800-372-9253 • Fax: 714-937-0818 • E-mail: sales@mkbattery.com



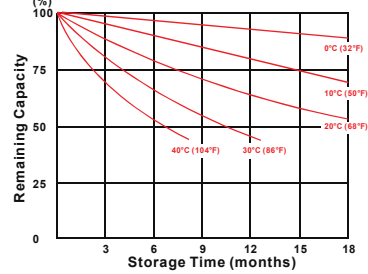


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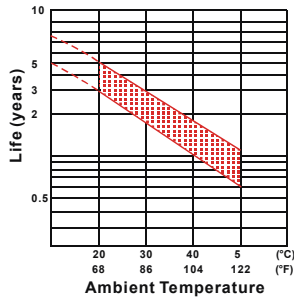
Effect of Temperature on Capacity 25°C (77°F)



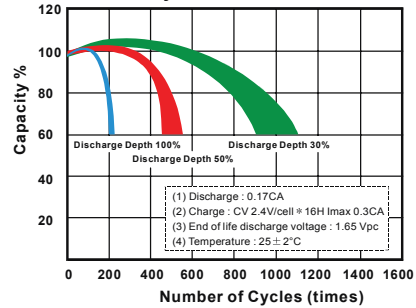
Capacity Retention Characteristic



Trickle (or float) Service Life



Cycle Service Life



## - PERFORMANCE DATA

Discharge Rates in Watts to Various End Voltages at 25°C (77°F)

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	22.7	25.7	27.8	29.8	30.7	31.7	32.8
10	min	16.4	18.7	20.0	21.0	21.3	21.8	22.3
15	min	13.3	14.8	15.4	15.8	16.0	16.1	16.3
30	min	7.78	8.73	9.08	9.43	9.53	9.65	9.77
60	min	4.38	4.95	5.32	5.62	5.68	5.78	5.87
120	min	2.70	2.97	3.10	3.20	3.25	3.32	3.38
180	min	2.12	2.30	2.40	2.47	2.50	2.55	2.60
240	min	1.72	1.85	1.93	1.98	2.02	2.03	2.07
300	min	1.53	1.64	1.68	1.72	1.73	1.75	1.78
600	min	1.02	1.08	1.10	1.12	1.13	1.14	1.15
1200	min	0.480	0.518	0.538	0.552	0.555	0.562	0.568

- Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

Time	End Voltage	1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	14.9	17.0	18.3	18.8	19.0	19.2	19.4
10	min	10.0	11.3	11.6	11.8	11.9	12.0	12.1
15	min	7.21	7.83	8.31	8.53	8.58	8.65	8.74
30	min	4.36	4.82	4.97	5.11	5.15	5.21	5.26
60	min	2.53	2.78	2.89	2.97	2.99	3.02	3.05
120	min	1.42	1.54	1.62	1.65	1.66	1.67	1.69
180	min	1.14	1.21	1.23	1.25	1.26	1.27	1.28
240	min	0.889	0.948	0.973	0.996	1.00	1.01	1.02
300	min	0.808	0.839	0.852	0.863	0.867	0.872	0.878
600	min	0.458	0.480	0.495	0.503	0.507	0.511	0.515
1200	min	0.231	0.245	0.257	0.265	0.268	0.272	0.276

All data on the spec. sheet is an average value:

The tolerance range :  $X < 6\text{min}$ (+15%~-15%),  $6\text{min} \leq X < 10\text{min}$ (+12%~-12%),  $10\text{min} \leq X < 60\text{min}$ (+8%~-8%),  $X \geq 60\text{min}$ (+5%~-5%)

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