



# RT680(6V8Ah)

## Specification

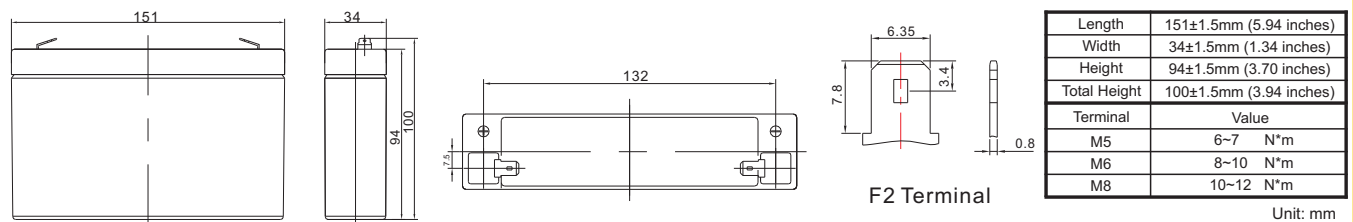
Cells Per Unit	3
Voltage Per Unit	6
Nominal Capacity	8Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 1.2 Kg (Tolerance ±4.0%)
Internal Resistance	Approx. 12 mΩ
Terminal	F1/F2
Max. Discharge Current	80A (5 sec)
Short Circuit Current	400A
Design Life	6~8 years (Float charging)
Recommended Maximum Charging Current	2.4A
Reference Capacity	C3 6.21AH C5 7.01AH C10 7.52AH C20 8.06AH
Standby Use Voltage	6.85 V~6.95 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	7.30 V~7.40 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



RT series is a general purpose battery with 6~8 years design life in float service. It meets with IEC, JIS, BS and YDT standards. With advanced AGM valve regulated technology and high purity raw material, the RT series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPS, Telecom, power grid, medical equipment, emergency light and security system applications.



## Dimensions



### Constant Current Discharge Characteristics : A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	31.72	20.69	15.26	8.832	5.103	3.011	2.189	1.743	1.471	0.983	0.801	0.417
1.65V	30.57	20.07	14.86	8.637	5.008	2.967	2.160	1.721	1.454	0.973	0.793	0.413
1.70V	29.08	19.26	14.33	8.381	4.883	2.908	2.121	1.692	1.432	0.960	0.783	0.409
1.75V	27.17	18.21	13.65	8.046	4.719	2.831	2.069	1.654	1.402	0.942	0.769	0.403
1.80V	24.75	16.88	12.77	7.611	4.504	2.729	2.002	1.604	1.362	0.919	0.752	0.395
1.85V	21.78	15.21	11.66	7.055	4.227	2.596	1.913	1.538	1.310	0.888	0.728	0.384

### Constant Power Discharge Characteristics : WPC (25°C)

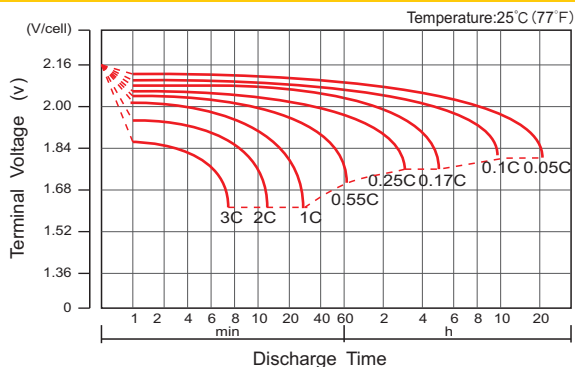
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	54.59	35.69	27.08	16.28	9.68	5.79	4.24	3.40	2.88	1.95	1.60	0.83
1.65V	54.02	35.54	26.92	16.16	9.61	5.75	4.21	3.37	2.86	1.94	1.59	0.83
1.70V	51.96	34.49	26.20	15.77	9.40	5.65	4.15	3.32	2.82	1.91	1.57	0.82
1.75V	49.41	33.21	25.31	15.29	9.13	5.53	4.06	3.26	2.77	1.88	1.54	0.81
1.80V	45.80	31.31	24.01	14.61	8.75	5.36	3.95	3.17	2.70	1.84	1.51	0.79
1.85V	41.02	28.71	22.23	13.68	8.27	5.12	3.79	3.05	2.61	1.78	1.46	0.77

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

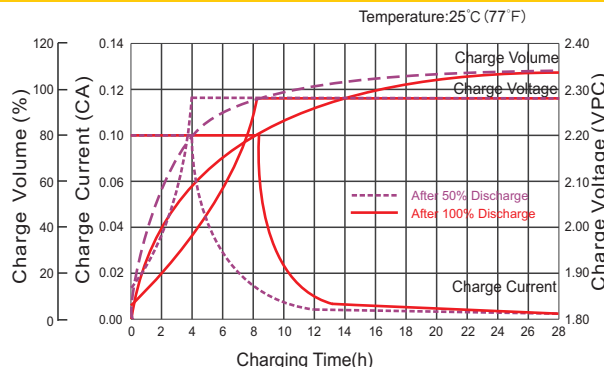
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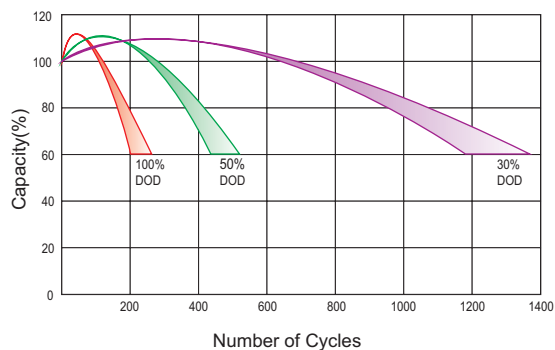
## Discharge Characteristics Curve



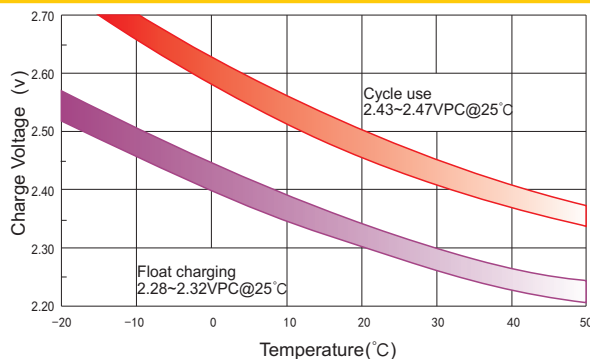
## Charge Characteristic Curve For Standby Use



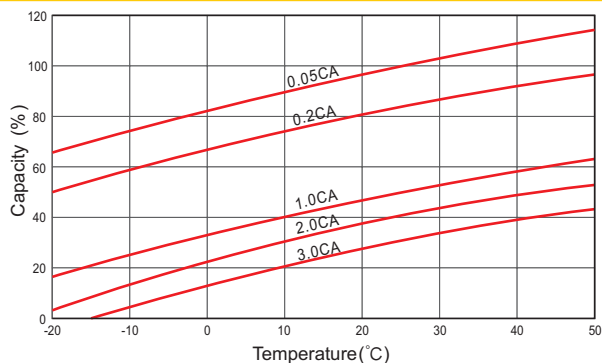
## Cycle Life In Relation To Depth Of Discharge



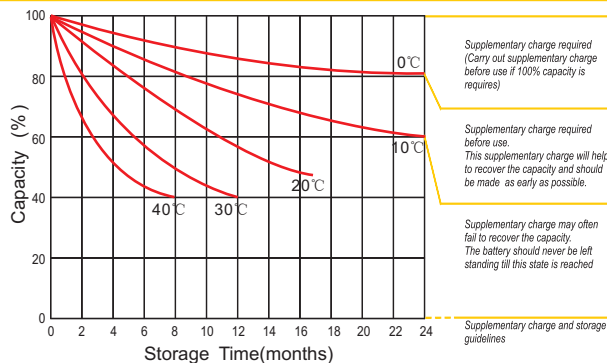
## Relationship Between Charging Voltage And Temperature



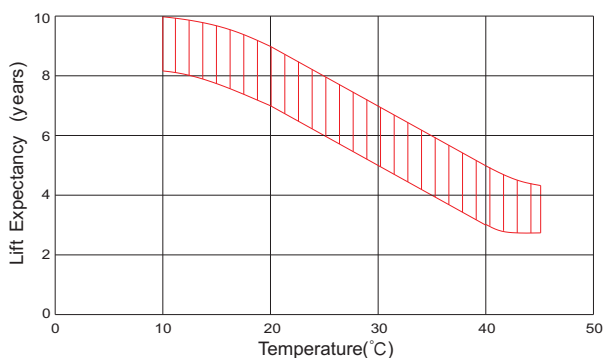
## Temperature Effects On Capacity



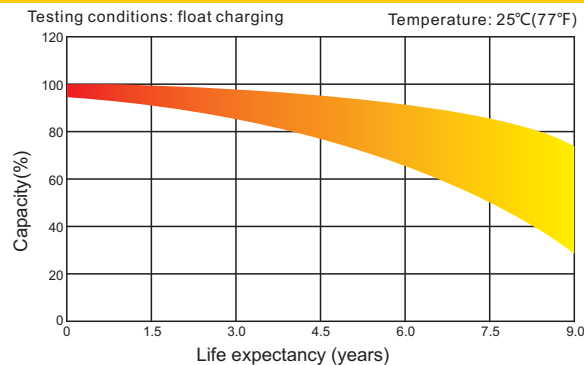
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



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**Moore & Moore Solutions, Inc.**  
 Phone: 484-302-7009  
 Email: mr@mooreu.com  
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