



# National Fire Equipment Ltd.

## Model BAT6V12A - 6 Volt - 12 AMP General Purpose Battery

### Specification

Cells Per Unit	3
Voltage Per Unit	6
Nominal Capacity	12Ah@20hour-rate to 1.75V per cell @25°C
Weight Approx.	Approx.1.66 Kg (Tolerance±4.0%)
Internal Resistance	Approx. 10.0 mΩ
Terminal	F1/F2
Max. Discharge Current	120A (5 sec)
Short Circuit Current	580A
Design Life	6~8 years (Float charging)
Recommended Maximum Charging Current	3.6A
Reference Capacity	C3 9.32AH C5 10.5AH C10 11.3AH C20 12.0AH
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	RT 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

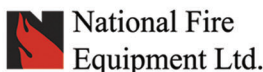
Length	150±1.5mm (5.91 inches)
Width	50±1.5mm (1.96 inches)
Height	93±1.5mm (3.66 inches)
Total Height	99±1.5mm (3.90 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	46.15	30.41	22.66	13.11	7.654	4.516	3.283	2.614	2.207	1.475	1.201	0.625
1.65V	44.48	29.50	22.07	12.83	7.513	4.450	3.239	2.582	2.181	1.460	1.190	0.620
1.70V	42.31	28.31	21.29	12.45	7.325	4.362	3.181	2.539	2.147	1.440	1.174	0.613
1.75V	39.53	26.77	20.27	11.95	7.078	4.246	3.104	2.481	2.102	1.414	1.154	0.604
1.80V	36.01	24.81	18.96	11.30	6.755	4.093	3.003	2.405	2.043	1.379	1.127	0.592
1.85V	31.69	22.35	17.31	10.48	6.340	3.894	2.870	2.306	1.964	1.332	1.092	0.577

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	79.43	52.46	40.21	24.18	14.53	8.69	6.36	5.09	4.32	2.92	2.40	1.25
1.65V	78.60	52.25	39.98	24.00	14.41	8.62	6.32	5.06	4.29	2.90	2.38	1.24
1.70V	75.60	50.71	38.91	23.42	14.10	8.48	6.22	4.98	4.23	2.87	2.35	1.23
1.75V	71.89	48.81	37.59	22.71	13.69	8.29	6.10	4.89	4.16	2.82	2.31	1.21
1.80V	66.65	46.02	35.66	21.70	13.13	8.03	5.92	4.76	4.05	2.76	2.26	1.19
1.85V	59.69	42.20	33.02	20.32	12.41	7.68	5.68	4.58	3.91	2.67	2.19	1.16



TORONTO: (905) 761-6355  
Toll Free: (800) 267-8508  
OTTAWA: (613) 723-6071

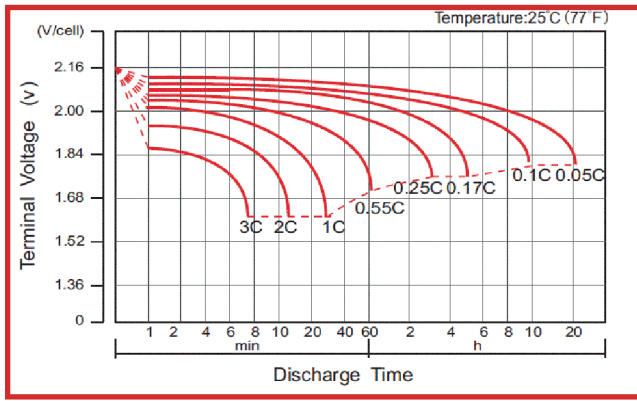
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Toll Free: (800)-667-2138  
BURNABY: (604)-299-4498

EDMONTON: (780) 455-3870  
Toll Free: (888)-891-1008  
CALGARY: (403) 236-5661

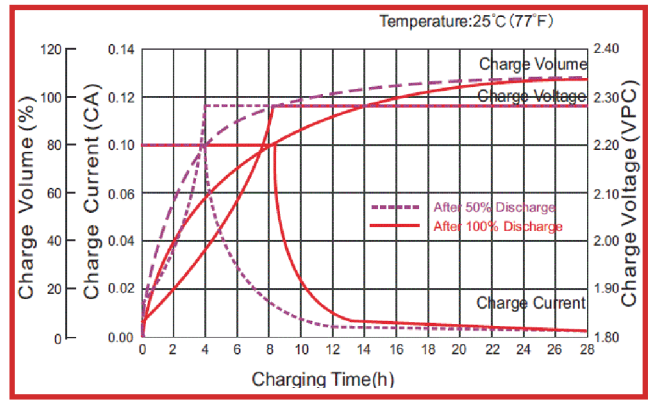
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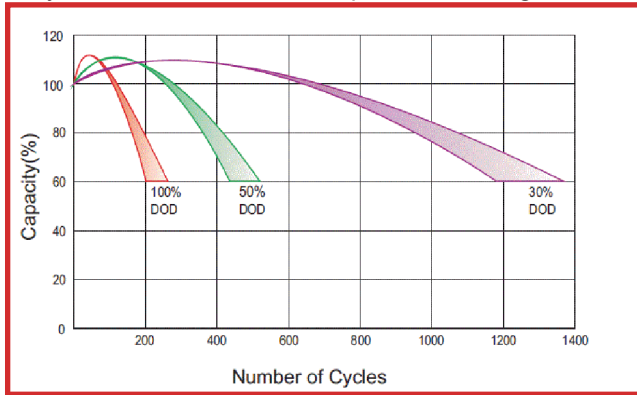
### Discharge Characteristics Curve Charge



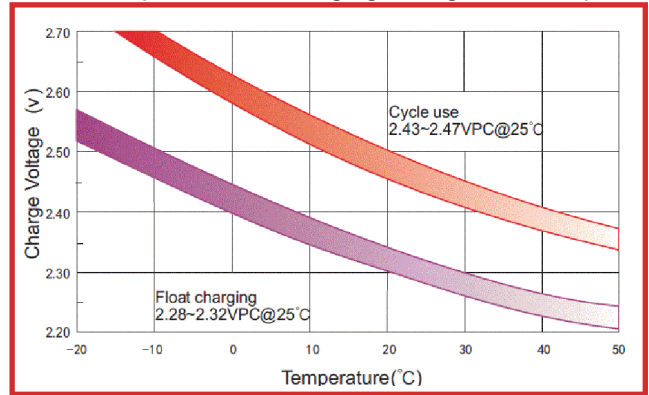
### Charge Characteristic Curve For Standby Use



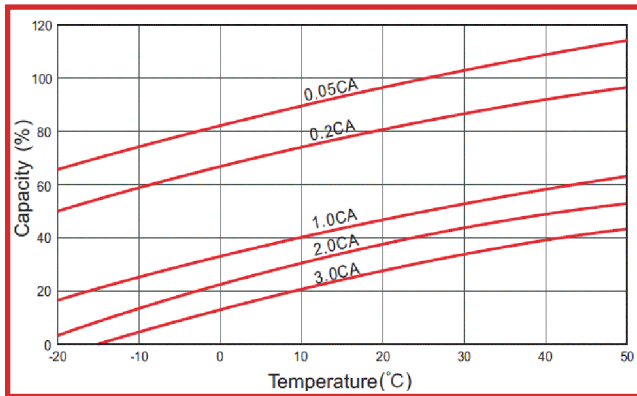
### Cycle Life In Relation To Depth Of Discharge



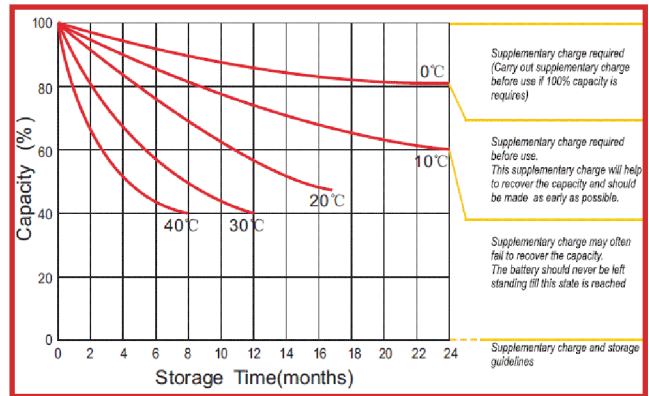
### Relationship Between Charging Voltage And Temperature



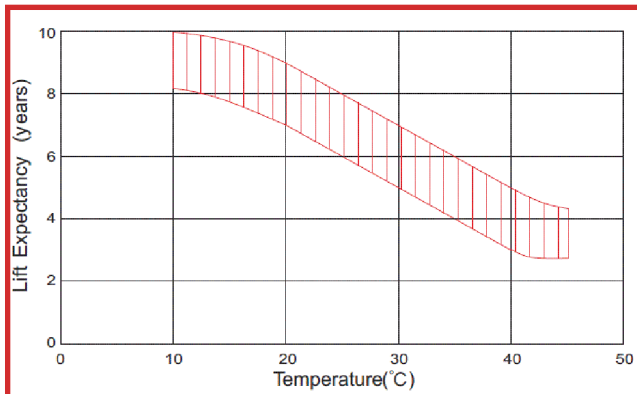
### Temperature Effects On Capacity



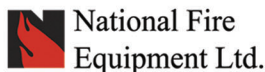
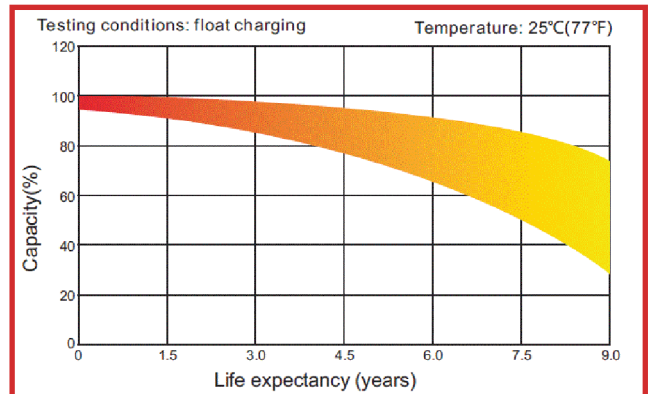
### Storage Characteristics



### Effect Of Temperature On Long Term Life



### Life Characteristics Of Standby Use



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