# DC50-12B

**50AH@20HR**
**12-Volt**

**DEEP CYCLE**

**Maintenance-Free**
**Sealed AGM Battery**

## Nominal Specifications

| Battery Model | DC50-12B | Rated Capacity | 50AH/20HR |
|---|---|---|---|

## Mechanical Specifications

| | | |
|---|---|---|
| Group Size | U1L | |
| Overall Height (H) | 171±2mm | 6.73″ |
| Container Height (h) | 171±2mm | 6.73″ |
| Length | 198±2mm | 7.80″ |
| Width | 166±2mm | 6.54″ |
| Weight | Approx.14.9kg | 32.85lbs. |
| Terminal Type | M6- Button Terminal | |
| Terminal Torque | 5.6-7.9 N.m | |
| Container Material | ABS Standard ˜UL 94-HB ˜ | |

## Electrical Specifications

| | |
|---|---|
| C100 | 56AH |
| C20 | 50AH |
| C10 | 45AH |
| C5 | 40AH |
| CCA | 350A |
| CA or MCA | 400A |
| HPCA | 470A |
| Max. Discharge Current | 750A (5s) |
| Internal Resistance | 5.0mΩ |

## Reserve Capacity

| | |
|---|---|
| Reserve @25 AMPS | 70 Minutes |
| Reserve @75 AMPS | / |

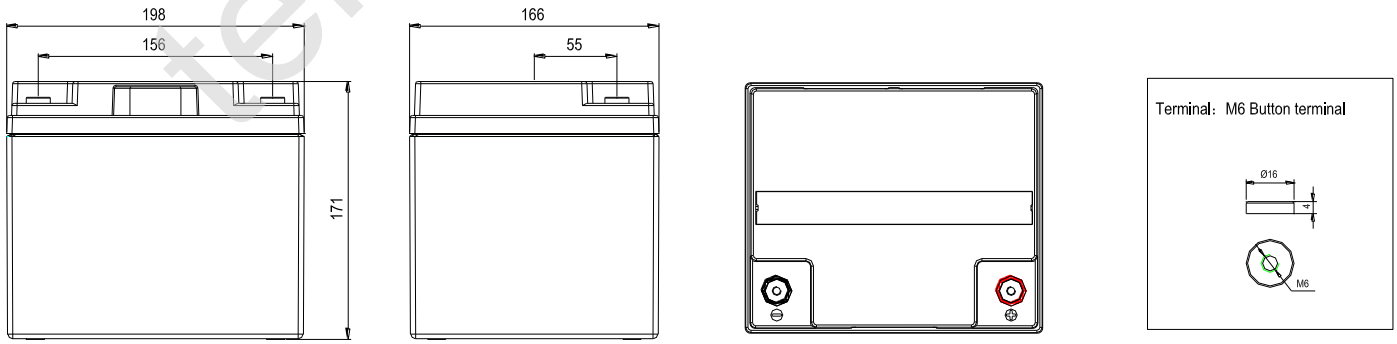
## Temperature Range Specifications

| | |
|---|---|
| Operating Temperature Range | Discharge : -15 ~+ 50 (5 ′~122 ′) |
| | Charge: -15 ~ +40 (5 ′~104 ′) |
| | Storage: -15 ~ +40 (5 ′~104 ′) |
| Recommended Operating Temperature Range | +74 ′(23 ) to +80 ′(27 ) |
| Self-Discharge | Less than 10% after 90 days, can be stored up to 6 months at 25 (77 ′);Fully recharging is required before usage, For higher temperatures the time interval will be shorter. |

## Charge Voltages

| | | |
|---|---|---|
| Float Charging Voltage | 13.5 to 13.8 VDC/unit@ (25°C) | |
| Equalization and Cycle Service Charging Voltage | 14.3 to 14.5 VDC/unit @(25°C) | |
| Maximum Charge Current(A) | 12.5A | |
| Charging Temperature Compensation | Cycle use | -4mV/cell/ |
| | Float use | -3mV/cell/ |

## BATTERY & TERMINAL DIMENSIONS (All units shown in mm)




Battery bank spacing required 12.5mm (1/2"inch) minimum

## Constant Current Discharge Rating Amperes @ 77 ′(25 )

| Cut off voltage V/cell | 15M | 30M | 45M | 1H | 2H | 3H | 5H | 8H | 10H | 12H | 20H |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.75V | 78 | 47 | 37 | 27 | 17.3 | 11.4 | 8.1 | 5.3 | 4.5 | 3.88 | 2.50 |

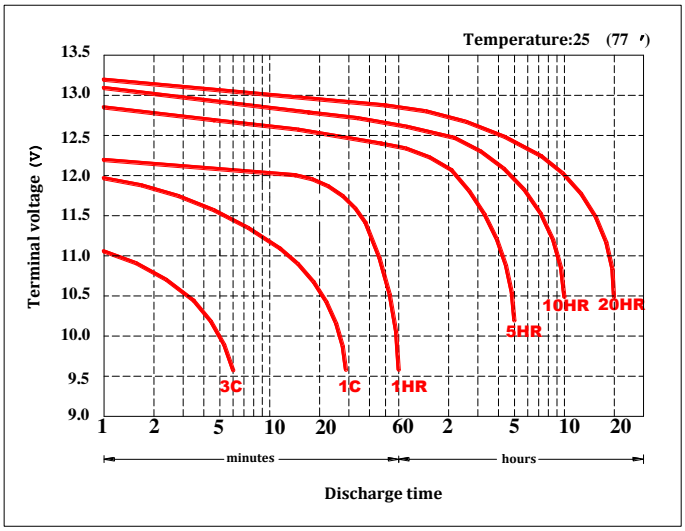
**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.


This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs specification are subject to modification without notice. Contact Fullriver for the latest information.

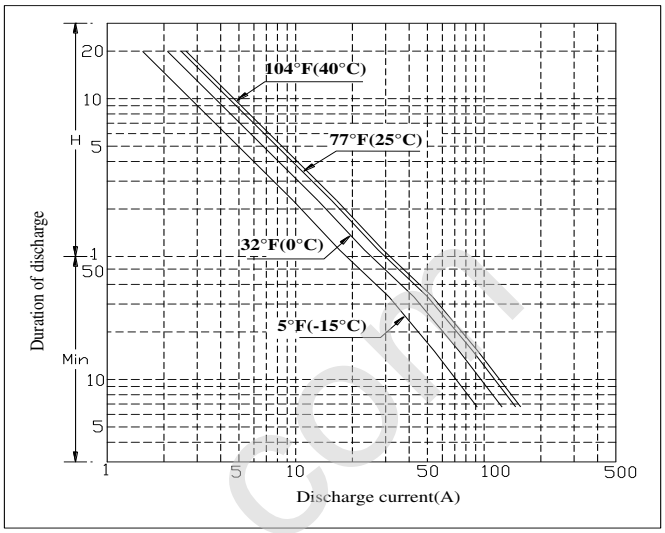
tekbaterias.com

# DC50-12B DATA SHEET

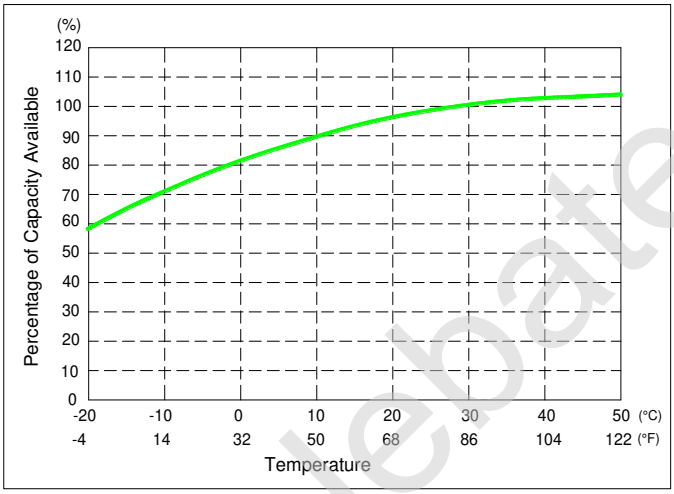
## Terminal Voltage(V) and Discharge Time



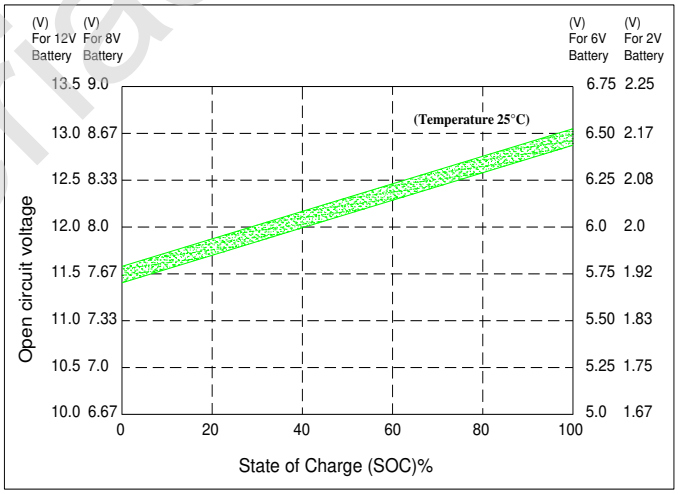

## Duration of discharge vs. Discharge current



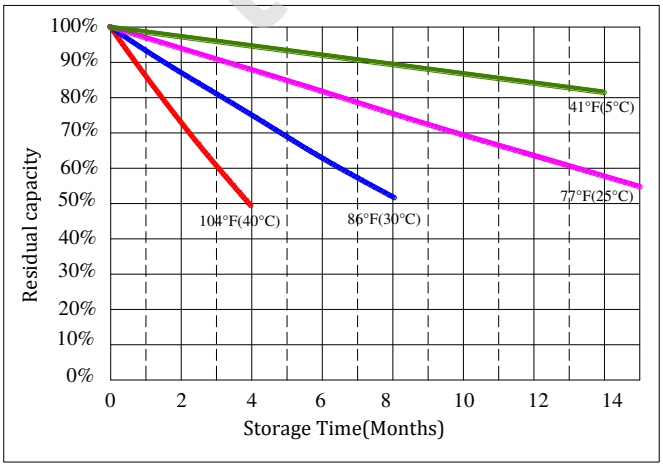

## Percent Capacity vs. Temperature



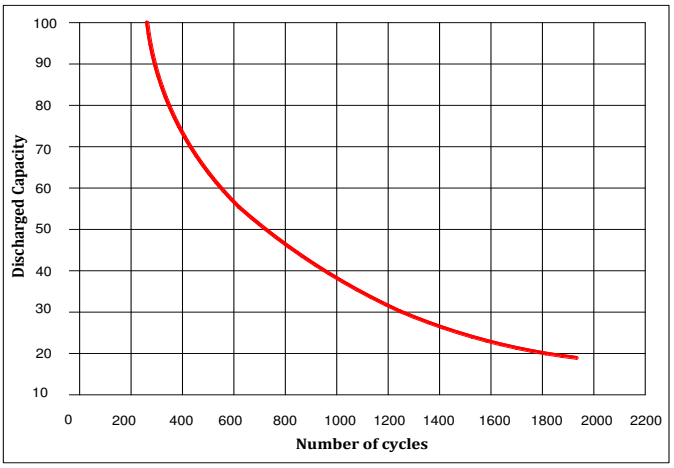

## State of Charge(SOC) vs Open Circuit Voltage(OCV)




## Capacity Retention Characteristic




## Cycle Life vs. Depth of Discharge(DOD)






This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs specification are subject to modification without notice. Contact Fullriver for the latest information.