UPG No. 40559

UPG Sealed Lead-Acid Battery

STAY POWERED®

Absorbant Glass Mat (AGM) technology for superior performance. Valve regulated, spill proof construction allows safe operation in any position. Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified. U.L. recognized under file number MH 20567.

UB445

Maintenance-Free

Specification

Nominal Voltage	4 volts
Nominal Capacity	77 F°(25°C)
20-hr (0.23A)	4.50 Ah
10-hr (0.42A)	4.19 Ah
5-hr (0.77A)	3.83 Ah
1-hr (0.90A)	0.90 Ah
Approximate Weight	1.1 lbs (.499 kg)
Internal Resistance (approx.)	18mΩ

Shelf Life (% of normal capacity at 68 F°(20°C)

3 Months	6 Months	12 Months
91%	83%	64%

Temperature Dependency of Capacity (20 hour rate)

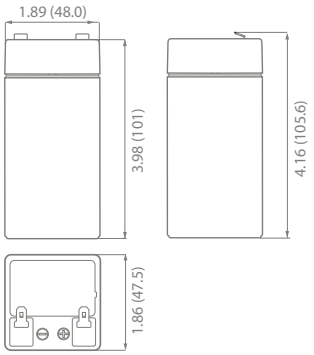
104° F (40°C)	77° F (25°C)	32° F (0°C)	5° F (-15°C)
102%	100%	85%	65%

AGM Operational Temperature	
Charge	32°F to 104°F (0°C to 40°C)
Discharge	5°F to 113°F (-15°C to 45°C)
AGM Storage Temperature	5°F to 104°F (-15°C to 40°C)

Due to continuous improvements to our products, product may vary slightly from depiction.

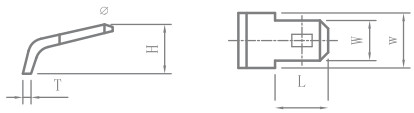
Charge Method (Constant Voltage)	
Cycle Use (Repeating Use)	
Initial Current	1.35 A or smaller
Control Voltage	4.87 - 4.93 V
Float Use	
Control Voltage	4.53 - 4.60 V

Physical Dimensions: in (mm)



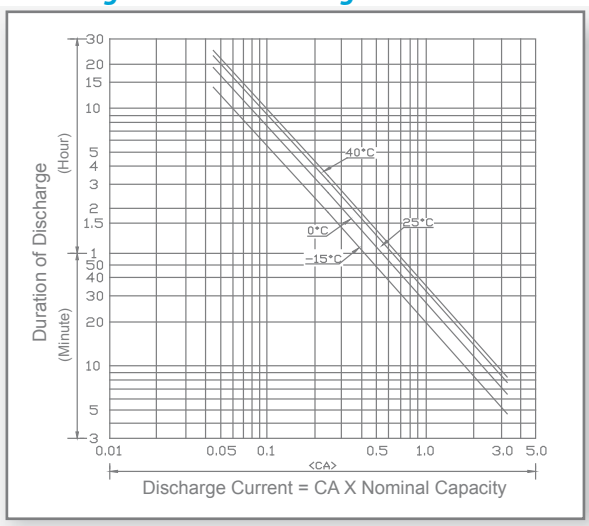
L: 1.89 in (48.0 mm)
W: 1.87 in (47.5 mm)
H: 3.98 in (101mm)
TH: 4.16 in (105.6 mm)
Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals

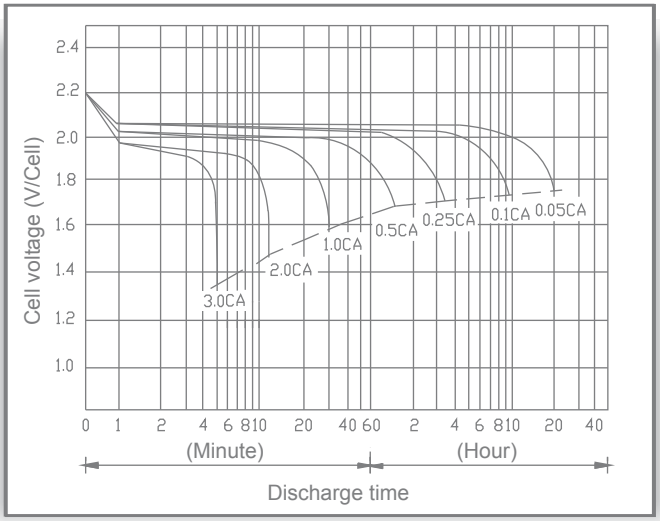


Dimension / Type	L	W	w	H	T
F1	6.50 mm 0.26 in	4.75 mm 0.19 in	6.00 mm 0.24 in	5.00 mm 0.20 in	0.80 mm 0.03 in

Discharge Time vs. Discharge Current



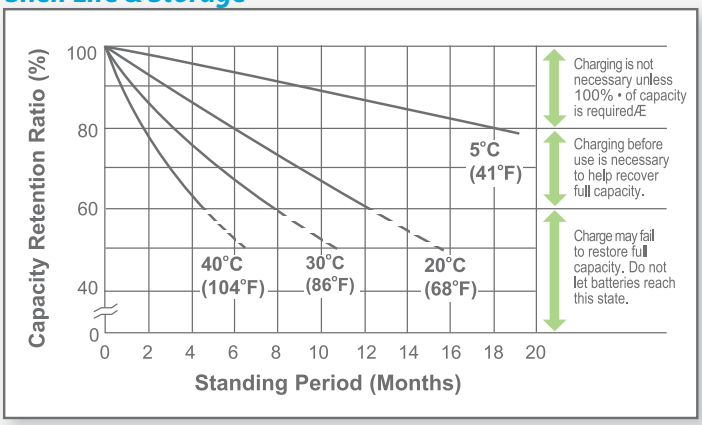
Discharge Characteristics



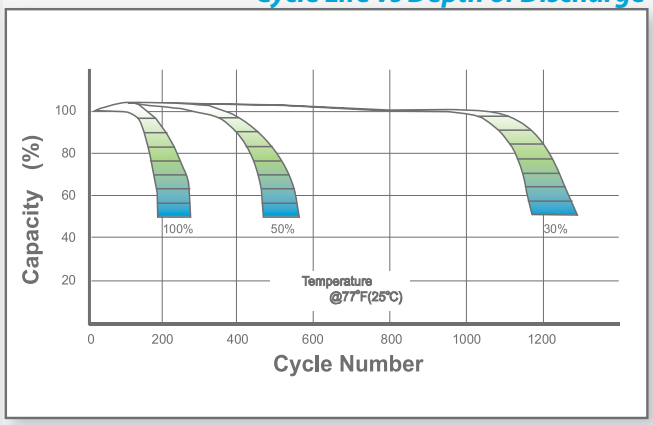
UB445

Maintenance-Free

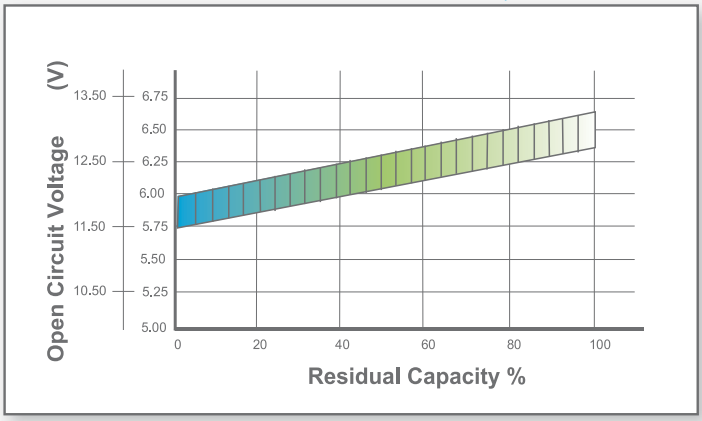
Shelf Life & Storage



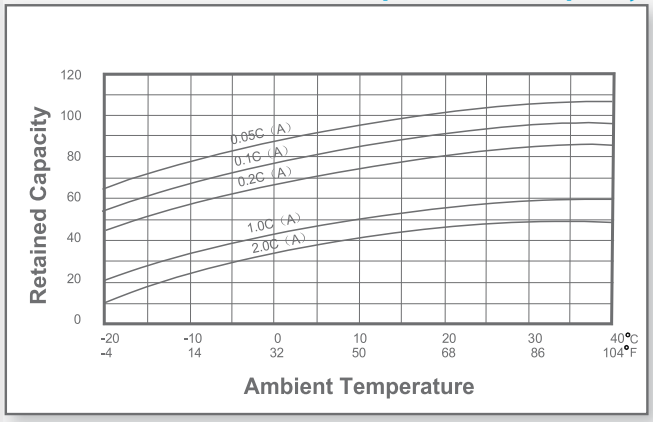
Cycle Life vs Depth of Discharge



Open Circuit Voltage vs Residual Capacity



Effect of Temperature on Capacity



Charge Current & Final Discharge Voltage

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃(77℉)	2.45	2.43~2.47	0.30C
Standby	25℃(77℉)	2.28	2.27~2.30	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C