

# Valve Regulated Lead-Acid Rechargeable Battery



# MPL80-12

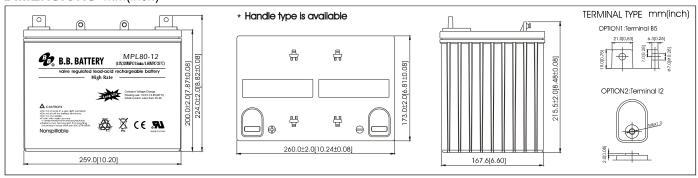
(12V, 320W/Cell 15min.)

MPL80-12 is designed with multi-plate technology so that it owns unparalleled high energy density. The unique alloy composition imposes our battery with more than 300 cycles at 100% discharge depth and 6-8 years' float life as well. Highly automated production with advanced heat-sealing and through-partitiontechnique ensures reliable performance which is superior to any other battery manufacturer. Since its case is made of polypropylene, the outdoor and indoor usage of this battery are both suitable.

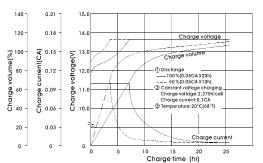
#### **SPECIFICATIONS**

Nominal Voltage(V)
Nominal Capacity(Ah)@25°C
10 hour rate F.V.1.75V/cell (7800 mA discharge to 10.5 Volts)78 Ah
5 hour rate F.V.1.75V/cell (14800 mA discharge to 10.5 Volts)
1 hour rate F.V.1.60V/cell (55300 mA discharge to 9.6 Volts)
Nominal Power by 15 mins rate F.V.1.60 V/cell(W/cell)
Terminal Hardware Initial Torque 58 kgf-cm (50 in-lbs; 5.6 N-m)
Approximate Weight····································
$\label{lem:linear} \textbf{Internal Resistance}$
Maximum Charging Current 23.4A
Maximum Discharge Current for 5 sec. 800 A
Short Circuit Current @ 0.1 sec. 2300A min.
<b>Cold Cranking Amp @ -18°C</b>
Operation Temperature
Charge
Discharge
Storage
Storage Duration ····· 6 months(20°C)
Container Material and Flammability PP, UL94 - V0 & HB
$\textbf{Application}  \cdots \cdots  \textbf{Telecom, UPS, Marine, Power station, Cable TV, etc.}$

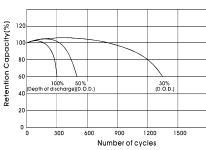
### **DIMENSIONS** mm(inch)



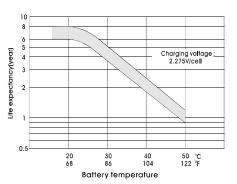
#### **BATTERY CHARGING CHARACTERISTICS** (Typical example of the charge characteristics for the standby use)



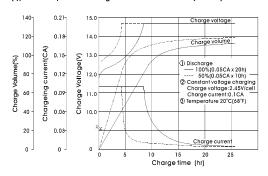
## BATTERY LIFE CHARACTERISTICS OF CYCLIC USE Testing Conditions: Discharge Current: 0.25C Amp(F.V.1.7v/cell) Charging Current: 0.1C Amp Charging Outmer: 120% Of Discharge Capacity Ambient Temperature: 20°C (68°F)



#### EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



#### BATTERY CHARGING CHARACTERISTICS (Typical example of the charge characteristics for the cycle use)



#### CHARGING PROCEDURE

Application	Charging method	Charging Voltage at 20°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging	Chargii 0.1CA (l	Temp (°C)	
				(CA)	100% discharge	50% discharge	(0)
For standby power Source	Constant	2.25~2.30	-3	0.3	24	20	0~50
For cycle service	current charging (with current restrication)	2.40~2.50	-4	0.3	16	10	(32-122°F)

<sup>\*</sup>Temperature compensation of charging voltage is not needed,when using the batteries within5°C to 35°C range.

#### CONSTANT POWER DISCHARGE CHARACTERISTICS @ 25°C(77°F)

·	Discharge time											
Final Voltage	5Min	10Min	15Min	20Min	25Min	30Min	40Min	50Min	60Min	90Min		
	Battery output power(W)											
10.80V	2771	2036	1692	1413	1225	1075	864	727	629	447		
10.50V	3105	2184	1790	1468	1263	1104	883	743	640	455		
10.20V	3312	2277	1847	1505	1287	1121	896	752	648	460		
9.90V	3450	2348	1891	1535	1307	1134	907	759	654	464		
9.60V	3549	2391	1920	1556	1324	1145	916	765	659	467		

#### CONSTANT CURRENT DISCHARGE CHARACTERISTICS @ 25°C(77°F)

	Discharge time												
Final Voltage	5Min	10Min	15Min	20Min	25Min	30Min	40Min	50Min	1 Hr	1.5Hr	2Hr	5Hr	10Hr
	Battery output current(Amperes)												
11.10V	220	161	135	112	96	84	68	57	50.9	36.0	28.8	13.9	7.2
10.80V	258	179	147	121	103	90	72	61	52.9	37.7	30.1	14.5	7.6
10.50V	283	193	155	126	108	93	74	62	53.8	38.3	30.5	14.8	7.8
10.20V	301	201	160	129	111	95	75	63	54.4	38.7	30.8	14.9	7.8
9.90V	313	207	164	132	112	96	76	64	54.9	39.0	31.1	14.9	7.8
9.60V	323	211	167	134	113	97	77	64	55.3	39.3	31.3	14.9	7.8



## **B.B. BATTERY CO., LTD.**

Web Site: http://www.bb-battery.com

USA:
B&B BATTERY(USA) INC.
6415 RANDOLPH ST.COMMERCE, CA,90040 U.S.A.
TEL:1-323-278-1900.1-800-278-8599
FAX:1-323-278-1268 E-Mail:sales@bb-battery.com

#### **EUROPE:**

B&B BATTERY(EUROPE) B.V. 3 WIJNGAARDVELD, 9300 AALST,BELGIUM TEL:(00)32-53781567 FAX:(00)32-53781567 E-Mail:hansdevriese@bb-battery.com

#### CHINA FACTORY:

B.B. BATTERY CO., LTD. CHENG DONG TRIAL AREA, HUANG GANG, RAOPING, GUANG DONG, CHINA, 515700 TEL:86-768-7601001-2 FAX:86-768-7601469 E-Mail:maggy@bb-battery.com

#### HONG KONG:

NATIONAL TRADING LTD. TEL:852-2301-3800 FAX:852-2739-1182 E-Mail:bbhk@hkstar.com

JAPAN: B&B BATTERY(JAPAN) CO., LTD. 1375-11 NARAHARA-MACHI,HACHIOJI, TOKYO 193-0803,JAPAN. TEL:81-426-25-6375 FAX:81-426-25-6375 E-Mail:miyata@bb-battery.com

#### TAIWAN:

B.B. BATTERY(TAIWAN) CO., LTD. TEL:886-6-502-5150 FAX:886-6-589-8087 E-Mail:maggy@bb-battery.com









REV. Jul. 2005