



### MPL80-12

Nominal Voltage (V) 12V

#### Nominal Capacity

10 hour rate	(8A	to	10.80V)	80.00Ah
5 hour rate	(13.6A	to	10.20V)	68.00Ah
1 hour rate	(48A	to	9.60V)	48.00Ah
1 C	(80A	to	9.60V)	50.67Ah

Weight Approx. 24.2kg (53.2lbs.)

Internal Resistance (at 1KHz) Approx. 5 mΩ

#### Maximum Discharge Current for

5 seconds: 960A

#### Charging Methods at 25°C (77°F)

Maximum Charging Current: 24A

Standby use:

Float Charging Voltage 13.50V to 13.80V

Coefficient -3.0mV/°C/cell

#### Operating Temperature Range

Charge -15°C (5°F) to 40°C (104°F)

Discharge -15°C (5°F) to 50°C (122°F)

Storage -15°C (5°F) to 40°C (104°F)

#### Charge Retention (shelf life) at 20°C (68°F)

1 month 98%

3 month 94%

6 month 85%

#### Case Material

ABS UL94 HB

#### Terminal

F8

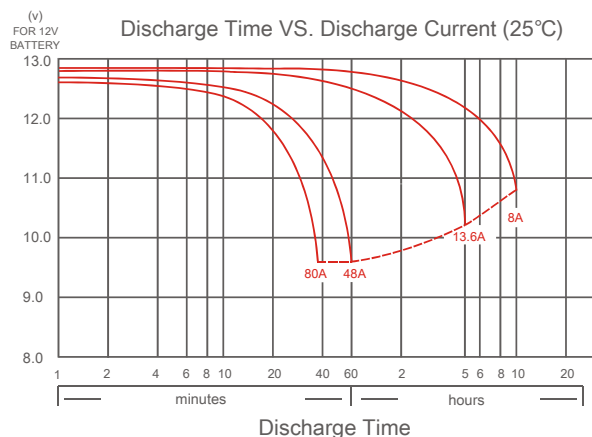
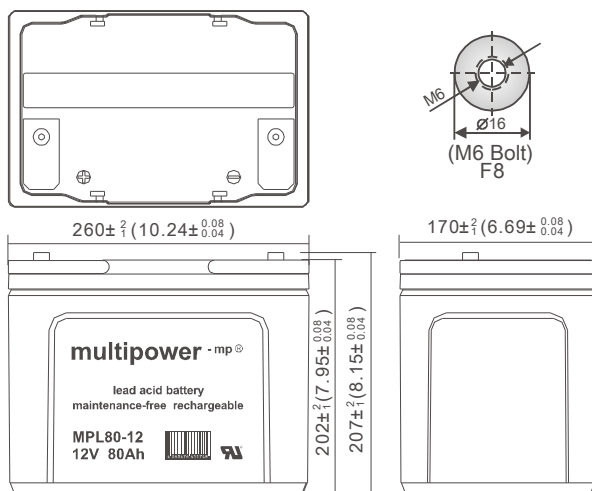
#### Description of torque value of hard ware for the terminals:

Recommended torque value M6: 7 N-m (71kgf-cm)

Maximum allowable torque value M6: 9 N-m (92kgf-cm)

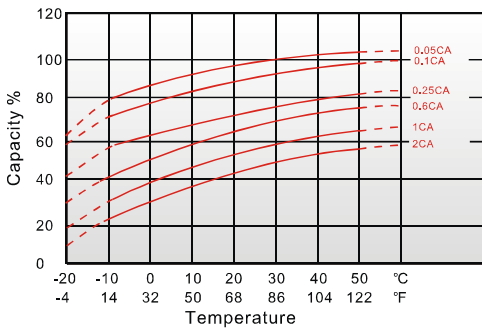
#### Design Life

Eurobat (20°C) : 10+ years

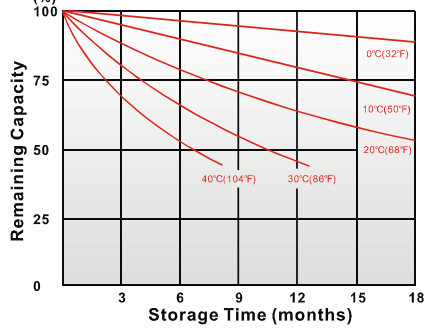


## CHARACTERISTIC & PERFORMANCE DATA

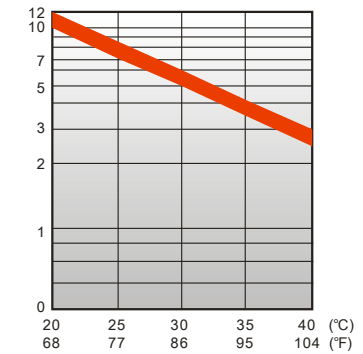
Effect of Temperature on Capacity 25°C(77°F)



Capacity Retention Characteristic



Trickle (or float) Service Life



### - PERFORMANCE DATA

Discharge Rates in Watts per Cell to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	407	429	491	521	537	552	567
10	min	278	294	336	357	368	378	388
15	min	178	225	240	274	280	287	294
30	min	139	149	155	159	160	162	165
60	min	82.5	86.9	89.4	91.4	92.1	92.9	94.9
120	min	47.2	49.8	51.3	52.7	53.2	53.7	54.3
180	min	34.0	35.8	36.8	37.7	38.0	38.3	38.8
240	min	27.8	28.8	29.7	30.3	30.5	30.8	31.2
300	min	25.2	25.7	26.1	26.4	26.6	26.7	26.9
600	min	15.4	16.0	16.0	16.2	16.2	16.3	16.3
1200	min	7.84	8.11	8.16	8.18	8.26	8.29	8.33

- Discharge Rates in Amperes per Battery to Various End Voltages at 25°C (77°F)

End Voltage		1.85V	1.80V	1.75V	1.70V	1.67V	1.65V	1.60V
5	min	178	214	245	272	281	292	304
10	min	112	143	167	186	192	199	207
15	min	90.5	109	124	138	141	145	150
30	min	63.2	72.6	79.4	84.5	85.6	87.2	89.0
60	min	39.4	42.3	44.1	45.6	46.1	46.7	48.0
120	min	20.2	22.4	23.9	25.0	25.4	25.8	26.3
180	min	15.8	17.4	18.4	19.3	19.6	20.0	20.4
240	min	12.9	13.9	14.7	15.3	15.6	15.9	16.2
300	min	12.0	12.8	13.3	13.6	13.8	14.0	14.3
600	min	7.73	8.00	8.05	8.07	8.12	8.16	8.21
1200	min	3.87	4.00	4.03	4.04	4.06	4.08	4.11

All data on the spec. sheet is an average value:

The tolerance range :  $X < 6\text{min}$  (+15%~-15%),  $6\text{min} \leq X < 10\text{min}$  (+12%~-12%),  $10\text{min} \leq X < 60\text{min}$  (+8%~-8%),  $X \geq 60\text{min}$  (+5%~-5%)