

# 6LF80-X 12V 80Ah

(Edition June 2004)

**SUNNY BATT** Rechargeable Products  
Sealed Lead Acid Battery

## General Features

- Positive and negative plates in lead-calcium-tin alloy
- Stable Quality & High Reliability
- Sealed Construction
- Long Service Life
- Maintenance-Free Operation
- Low Pressure Venting System
- Low Self Discharge
- U. L. Component Recognition
- Six months shelf life at 20°C
- Design life 10 years

## LF Series

### General purpose application

SUNNY BATT LF series are designed for general purpose applications, such as UPS, telecom, electrical utilities.

With 10 years design life, the batteries comply to the most popular international standards, such as IEC896-2, BS6290-4, Eurobat Guide.

The battery container and cover are available both in V0 class flame retardant ABS or HBO ABS plastics.

SUNNY BATT GROUP . has come to obtain wide recognition from customers all over the world. This is not only due to the fact that our products are featured by reliable stability in quality, but also because we attach great importance to our communication with customers and our perfect understanding of customers' requirements as well.



## Dimensions and Weight

	<i>SI Units</i>	<i>English Units</i>
Length	350mm	13.8inch
Width	167mm	6.57inch
Height	179mm	7.05inch
Total Height	179mm	7.05inch
Approx. Weight	22.5Kg	49.6lbs

## Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 77°F(25°C)
  - 10 hour rate (8.00A, 10.8V) 80.0Ah
  - 5 hour rate (14.4A, 10.5V) 72.0Ah
  - 1 hour rate (53.7A, 9.60V) 53.7Ah
- Internal Resistance
  - Fully Charged battery 77°F(25°C) 5.5mOhms
- Self-Discharge
  - 3% of capacity declined per month at 20°C(average)
- Operating Temperature Range
  - Discharge -20~60°C
  - Charge -10~60°C
  - Storage -20~60°C
- Max. Discharge Current 77°F(25°C) 750A(5s)
- Short Circuit Current 1900A
- Charge Methods: Constant Voltage Charge 77°F(25°C)
  - Cycle use 2.30-2.35VPC
  - Maximum charging current 24A
  - Temperature compensation -30mV/°C
- Standby use 2.23-2.27VPC
  - Temperature compensation -20mV/°C

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## Discharge Data

Constant Current Discharge Data ( Amperes at 25°C )																									
End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	247	188	149	118	99.6	87.3	78.3	71.5	66.2	61.2	57.1	53.7	38.2	30.5	25.8	22.7	17.9	15.0	12.8	11.1	9.91	8.96	8.20	6.90	3.72
1.65	233	178	137	110	93.8	83.0	74.1	67.4	62.2	58.0	54.5	51.6	37.1	29.8	25.5	22.5	17.7	14.7	12.5	11.0	9.79	8.88	8.15	6.86	3.70
1.70	218	168	132	106	90.6	80.3	72.0	65.8	61.0	56.5	52.8	49.8	36.1	29.2	25.1	22.4	17.6	14.7	12.5	10.9	9.75	8.83	8.10	6.82	3.65
1.75	204	159	126	102	87.3	77.6	68.9	62.4	57.3	53.2	49.9	47.1	34.4	28.1	24.3	21.8	17.2	14.4	12.3	10.8	9.63	8.75	8.05	6.78	3.63
1.80	190	149	118	96.5	83.6	75.0	66.8	60.7	55.9	52.1	48.9	46.3	33.5	27.1	23.2	20.7	16.6	14.1	12.1	10.6	9.52	8.68	8.00	6.73	3.61

Constant Power Discharge Data ( Watts per cell at 25°C )																									
End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	433	323	258	212	184	165	147	134	124	114	105	98.6	70.5	56.5	48.1	42.5	33.4	27.9	24.0	21.2	19.1	17.4	16.1	13.7	7.30
1.65	420	310	250	204	176	157	142	131	122	112	104	97.8	69.5	55.3	46.8	41.1	32.5	27.4	23.5	20.7	18.6	17.0	15.7	13.3	7.20
1.70	390	299	246	199	170	151	136	126	117	108	100	93.8	67.1	53.7	45.7	40.4	32.0	27.0	23.1	20.4	18.3	16.7	15.4	13.1	7.10
1.75	368	287	232	191	166	149	134	123	114	105	98.2	92.3	66.1	53.0	45.1	39.9	31.7	26.8	22.9	20.1	18.0	16.4	15.1	12.8	7.00
1.80	349	275	218	182	160	146	131	120	111	102	94.6	88.5	63.8	51.4	44.0	39.0	31.1	26.4	22.5	19.8	17.7	16.1	14.8	12.4	6.90

## Performance drawings



