

PBX SERIES-High Rate / UPS

PBX12-12 (12V-12Ah) 55W

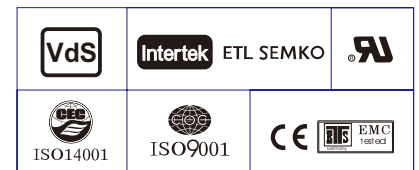
Specification

Nominal Voltage	12V	
Watts(15min Rate)	55.0 Watts	
Dimension	Length	151 ± 2mm
	Width	98 ± 1mm
	Container Height	95 ± 1mm
	Total Height (with Terminal)	101 ± 2mm
Approx Weight	Approx 3.8 kg	
Terminal	T1	
Container Material	ABS	
Rated Capacity	12 Ah/1.20A	(10hr ,1.80V/cell,25°C)
	12 Ah/1.40A	(8hr,1.80V/cell,25°C)
	11 Ah/2.20A	(5hr,1.75V/cell,25°C)
	9.45 Ah/3.5A	(3hr,1.75V/cell,25°C)
	8.1 Ah/8.1A	(1hr,1.60V/cell,25°C)
Max. Discharge Current	180A (5s)	
Internal Resistance	Approx 16mΩ	
Operating Temp.Range	Discharge	-15 ~ 50°C
	Charge	: 0 ~ 40°C
	Storage	-15 ~ 40°C
Nominal Operating Temp. Range	25 ± 3°C	
Cycle Use	Initial Charging Current less than 3.6A.Voltage	
	14.4V~14.9V at 25°C Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.6V~13.8V at 25°C Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C	102%
	25°C	100%
	0°C	85%
Self Discharge	PBX series batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ UPS (High rate)
- ◆ High power backup supply
- ◆ Emergency power supply
- ◆ Starting system
- ◆ Power tools
- ◆ Emergency lighting
- ◆ Electric starting



Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.80V	71.6	53.7	51.0	27.1	19.7	13.7	8.6	6.3	3.9	2.5	2.2	1.2
1.75V	74.5	55.9	53.1	28.2	20.5	14.2	9.0	6.5	4.1	2.6	2.3	1.2
1.70V	75.9	56.9	54.1	28.7	20.9	14.5	9.1	6.6	4.1	2.7	2.4	1.3
1.67V	77.3	58.0	55.1	29.2	21.3	14.7	9.3	6.8	4.2	2.7	2.4	1.3
1.60V	78.8	59.1	56.1	29.8	21.7	15.0	9.5	6.9	4.3	2.8	2.5	1.3

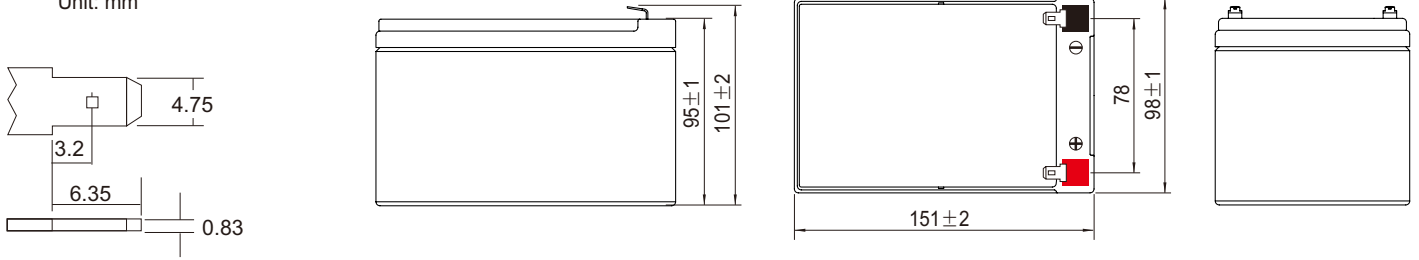
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.80V	38.4	28.8	27.4	14.5	10.6	7.3	4.6	3.4	2.1	1.4	1.20	0.64
1.75V	39.9	30.0	28.5	15.1	11.0	7.6	4.8	3.5	2.2	1.4	1.25	0.66
1.70V	40.7	30.5	29.0	15.4	11.2	7.8	4.9	3.6	2.2	1.4	1.28	0.67
1.67V	41.5	31.1	29.5	15.7	11.4	7.9	5.0	3.6	2.3	1.5	1.29	0.69
1.60V	42.2	31.7	30.1	16.0	11.6	8.1	5.1	3.7	2.3	1.5	1.32	0.70

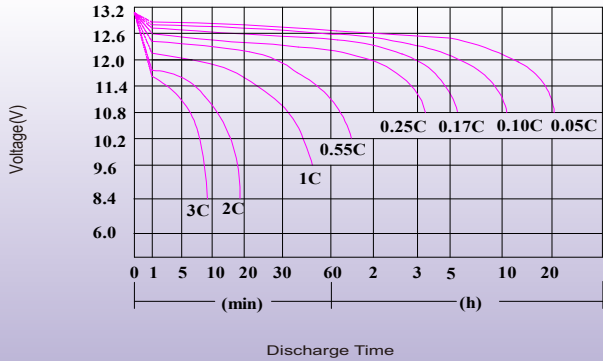
Dimensions

T1 Terminal

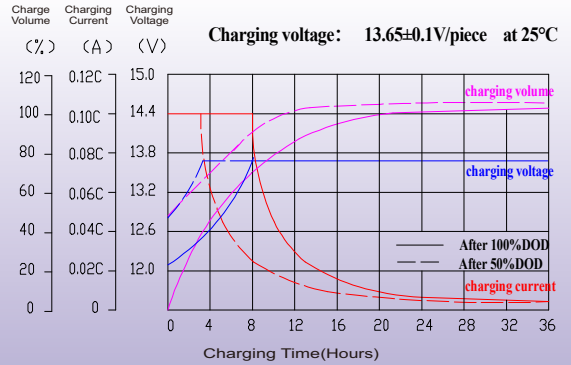
Unit: mm



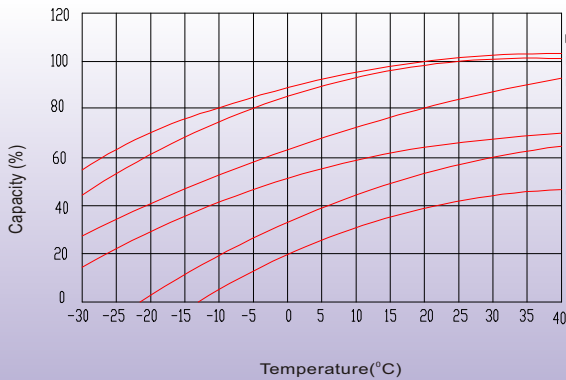
Discharge Characteristics



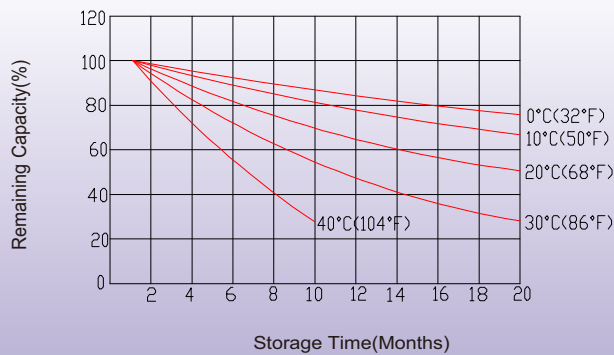
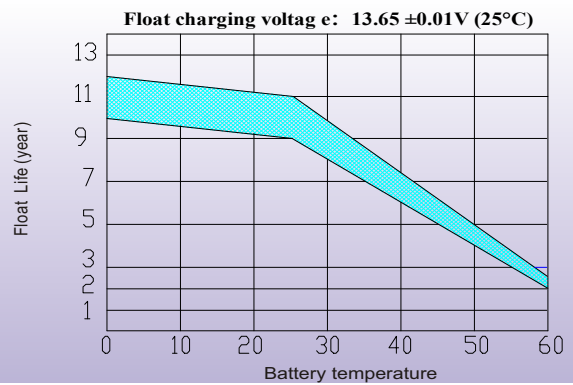
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8-10hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Contact