

Features:

- ◆ Maintenance-free operation
- ◆ Stable quality and high reliability
- ◆ Compact design
- ◆ 5 years design time (at 25°C)



Applications

- ◆ UPS
- ◆ Emergency lighting
- ◆ Fire alarm and security systems
- ◆ Telecommunication system
- ◆ Backup power for testing and measuring instruments
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system

Specifications

Nominal Voltage	12V(6cells)
Nominal Capacity	7.0AH (20hr,1.75V/cell,25°C/77°F) 5.95AH (5hr,1.75V/cell,25°C/77°F) 4.20AH(1hr,1.60V/cell,25°C/77°F)
Dimension	Length 151±1mm
	Width 65±1mm
	Container Height 95±2mm
	Total Height(with Terminal) 102±2mm
Weight	2000G ± 3%
Terminal	F1
Container Material	ABS UL94 V0
Max.Discharge Current	105A(5S)
Internal Resistance	Approx 25mΩ

Operationg Temp Range	Discharge: -15—50°C(5—122°F) Charge : 0—40°C(32—104°F) Storage : -15—40°C(5—104°F)
Nominal Operating Temp. Range	25±3°C(77±5°F)
Cycle Use	14.4~14.8V(25°C/77°F)Temp.Coefficient-30mV/°C Initial Charging Current Less than 2.10A
Standby Use	13.5V~13.8V(25°C/77°F)Temp.Coefficient-20mV/°C No limit on Initial Charging Current
Capacity affected by Temperature	40°C(104°F) 103%
	25°C(77°F) 100%
	0°C(32°F) 86%
Self Discharge	CASIL CA series batteries may be stored for up to 6months at 25°C(77°F)and then a freshening charge is required. For higher temperatures the time interval will be shorter.

Constant Current Discharge(Ampere at 25°C/77 °F)

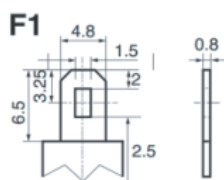
F.V/Time	5min	10min	15min	30min	45min	1h	3h	4h	5h	6h	8h	10h	20h
1.60V	22.4	17.5	11.9	6.6	5.6	4.20	1.8	1.46	1.24	1.09	0.95	0.656	0.364
1.67V	22.0	17.2	11.7	6.4	5.49	4.12	1.8	1.44	1.23	1.08	0.94	0.649	0.361
1.70V	21.5	16.8	11.4	6.3	5.38	4.03	1.8	1.43	1.21	1.07	0.93	0.643	0.357
1.75V	21.1	16.5	11.2	6.2	5.27	3.95	1.75	1.40	1.19	1.05	0.91	0.630	0.350
1.80V	20.7	16.1	11.0	6.1	5.17	3.87	1.72	1.37	1.17	1.03	0.89	0.617	0.343

Constant Power Discharge(Watts per cell at 25°C/77 °F)

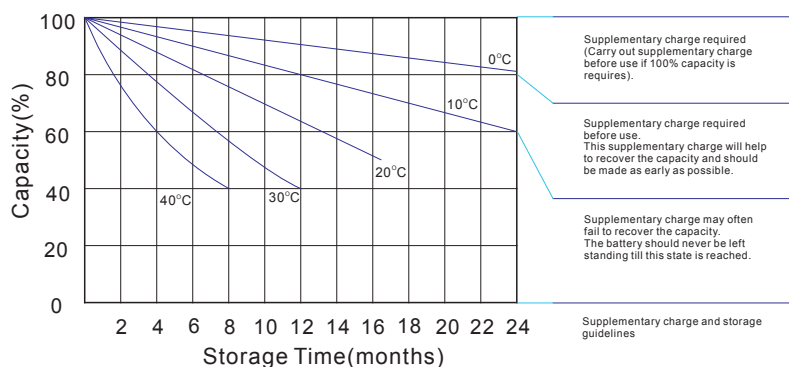
F.V/Time	5min	10min	15min	30min	45min	1h	3h	4h	5h	6h	8h	10h	20h
1.60V	40.3	31.5	21.4	11.8	10.6	8.0	3.64	2.91	2.48	2.19	1.89	1.31	0.728
1.67V	39.5	30.9	21.0	11.6	10.4	7.8	3.61	2.88	2.45	2.16	1.87	1.30	0.721
1.70V	38.7	30.3	20.6	11.4	10.2	7.7	3.57	2.86	2.43	2.14	1.86	1.29	0.714
1.75V	37.9	29.6	20.2	11.1	10.0	7.5	3.50	2.80	2.38	2.10	1.82	1.26	0.700
1.80V	37.2	29.1	19.8	10.9	9.8	7.4	3.43	2.74	2.33	2.06	1.78	1.23	0.686

Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

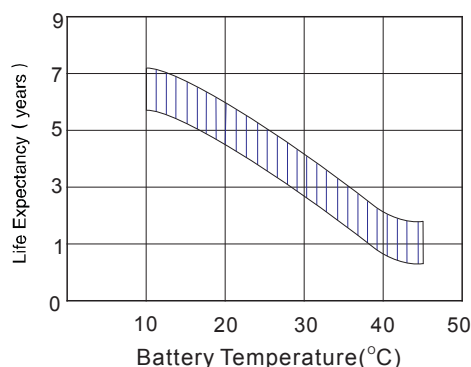
Terminal



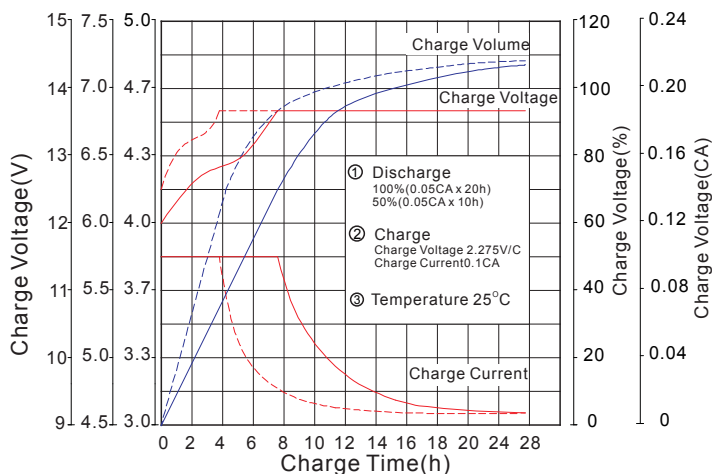
Storage characteristics



Effect of temperature on long term float life

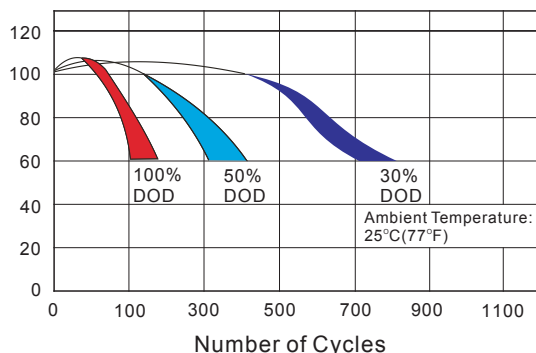


Charge characteristic Curve for standby use

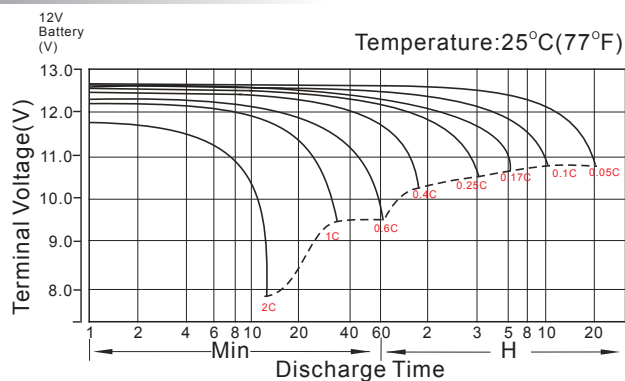


Cycle Life in Relation to Depth of Discharge

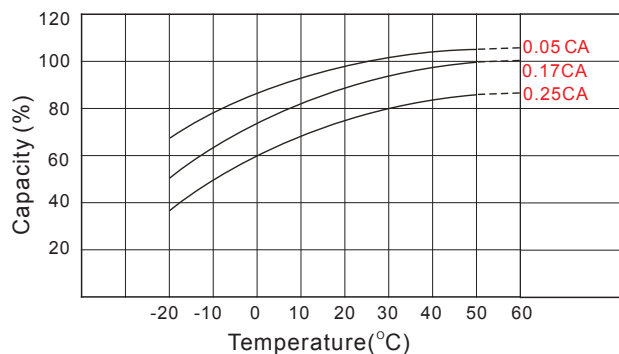
Testing condition
Discharging: current 0.17C (FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume: 125% of discharged capacity.



Discharge characteristic Curve



Temperature Effects in Relation to Battery Capacity



This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice.