

ECL12-2.3 (12V 2.3Ah)
Specification

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	2.3Ah	
Dimension	Length	178±2mm(7.01 inches)
	Width	34±1mm(1.34 inches)
	Containeriner Height	60±1mm(2.40 inches)
	Total Height (With terminal)	67±1mm(2.64 inches)
	Approx Weight	Approx0.9kgs(1.98 lbs)
Design life	5 years	
Terminal	F1/F2	
Container Material	ABS	
Rated Capacity	2.3Ah/0.12A	(20hr, 1.75V/Cell, 25 °C/77°F)
	2.2Ah/0.22A	(10hr, 1.80V/Cell, 25 °C/77°F)
	2.05Ah/0.41A	(5hr, 1.75V/Cell, 25 °C/77°F)
	1.52Ah/1.52A	(1hr, 1.60V/Cell, 25 °C/77°F)
Internal Resistance	Appro≤50mΩ	
Operating Temp. Range	Discharge: -15 °C~45 °C	
	Charge: 0 °C~45 °C	
	Storage: -15 °C~45 °C	
Nominal Operating Temp. Range	25±3 °C(77±5°F)	
Cycle Use	Initial Charging Current Less than 0.69A. Voltage 14.4V-15.0V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Standby Use	No limit on Intital Charging Current Voltage 13.5V-13.8V at 25 °C(77°F) Temp. Coefficient-20mV/C	
Capacity affected by Temperature	40 °C(104°F)	103%
	25 °C(77°F)	100%
	0 °C(32°F)	86%
Self Discharge	ECL series batteries may be stored for up to 6 montns at25 °C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	


Applications

- ♦ All purpose
- ♦ Uninterruptable Power Supply(UPS)
- ♦ Electric Power System(EPS)
- ♦ Emergency backup power supply
- ♦ Emergency light
- ♦ Railway signal
- ♦ Aircraft signal
- ♦ Alarm and securitysystem
- ♦ Electronic apparatus & equipment
- ♦ Communication power supply
- ♦ DC power supply
- ♦ Auto controlsystem

Constant Current Discharge (Amperes) at 25 °C (77 °F)

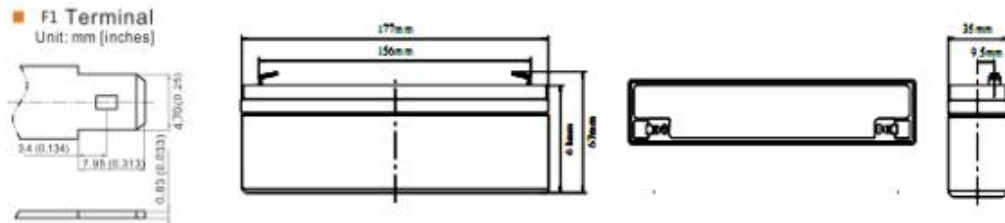
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	6.65	4.27	3.56	2.37	1.70	1.47	0.65	0.63	0.43	0.28	0.25	0.13
1.65V	6.53	4.20	3.50	2.33	1.67	1.44	0.63	0.62	0.42	0.28	0.25	0.13
1.70V	6.41	4.12	3.43	2.29	1.64	1.41	0.62	0.61	0.41	0.27	0.24	0.13
1.75V	6.28	4.04	3.36	2.24	1.61	1.39	0.61	0.60	0.41	0.27	0.24	0.13
1.80V	6.04	3.88	3.24	2.16	1.55	1.33	0.59	0.58	0.39	0.26	0.23	0.12

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

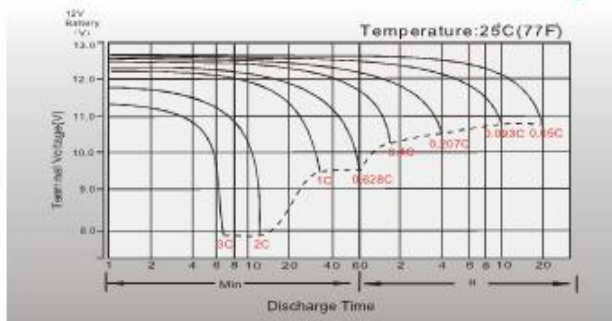
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	12.79	8.22	6.85	4.57	3.28	2.82	1.25	1.22	0.83	0.55	0.49	0.26
1.65V	12.56	8.08	6.73	4.49	3.22	2.77	1.22	1.20	0.81	0.54	0.48	0.25
1.70V	12.33	7.93	6.60	4.40	3.16	2.72	1.20	1.17	0.80	0.53	0.47	0.25
1.75V	12.10	7.78	6.48	4.32	3.10	2.67	1.18	1.15	0.78	0.52	0.46	0.24
1.80V	11.63	7.48	6.23	4.15	2.98	2.57	1.13	1.11	0.75	0.50	0.44	0.23

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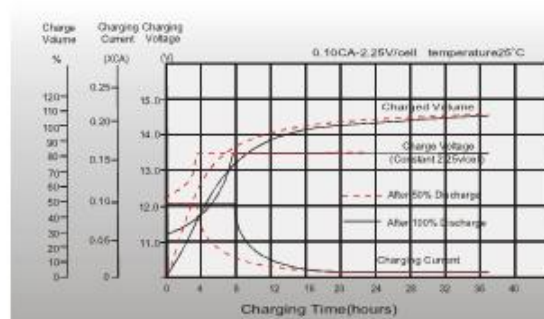
Dimensions



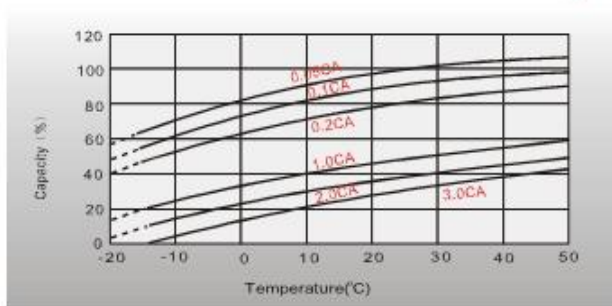
Discharge Characteristics



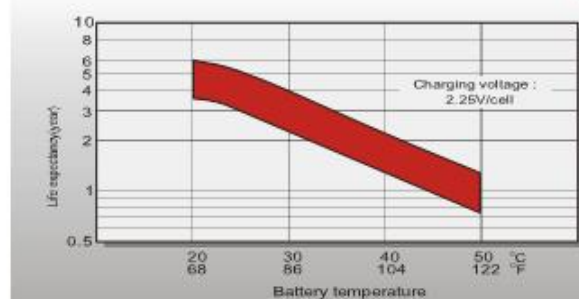
Float Charging Characteristics



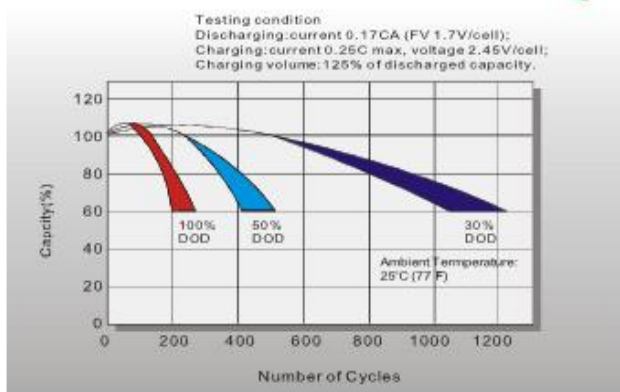
Temperature Effects in Relation to Battery Capacity



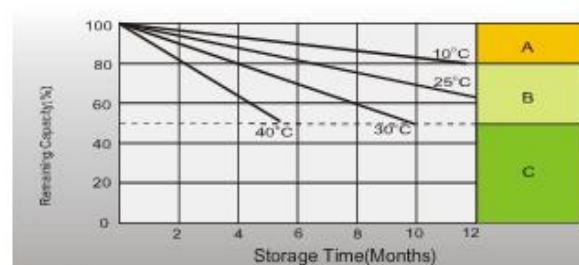
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



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 voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
3. Charged for 8-10 hours 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.

Specifications subject to change without prior notice.

