



Rechargeable Sealed Lead - Acid (VRLA) Battery

SUPERLAC

10 Year Life Stationary Type - SE Series

Nominal Voltage 12 Volt

20 Hour Rate Capacity 50 Ah



Dimensions	mm	Inches	Tolerance
Length	299	11.77	+/- 1mm (0.04In)
Width	128	5.04	+/- 1mm (0.04In)
Case Height	201	7.91	+/- 1mm (0.04In)
Terminal Height	201	7.91	+/- 1mm (0.04In)

Weight	Kg.	Lbs.	(approx.)
	18.00	39.68	

Case Material Synthetic Resin (ABS)

Terminal Threaded Post (M6)

Maximum Short Duration Discharge Current
(Maximum Duration: 1 Minute) 150 Amperes

Internal Resistance (Fully Charged Battery)
6 mOhm (approx.)

Constant Current Discharge Characteristics (25°C / 77°F)

Discharge Time	Capacity in Ah's	Discharge Amperes	Final Voltage	Discharge C-Rate
100 Hrs	52.00	0.52	11.40	0.01
20 Hrs	50.00	2.50	10.50	0.05
9 Hrs	45.84	5.00	10.50	0.10
4 Hrs	40.00	10.00	10.20	0.20
75 Min	31.25	25.00	9.60	0.50
31 Min	26.00	50.00	9.00	1.00
12 Min	20.50	100.00	8.10	2.00

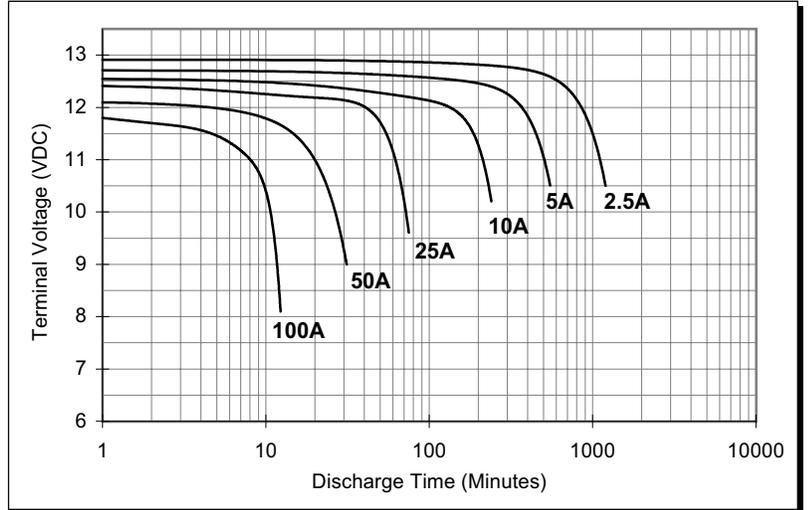
Energy Density (@ 20 Hour Rate)
78 Watt-Hours / Litre (1.28 Watt-Hours / Cubic Inch)

Specific Energy (@ 20 Hour Rate)
33.33 Watt-Hours / Kg (15.12 Watt-Hours / Pound)

Operating Temperature Range
Discharge -15°C (5°F) ~ 45°C (113°F)
Recharge 0°C (32°F) ~ 40°C (104°F)
Storage -20°C (-4°F) ~ 40°C (104°F)

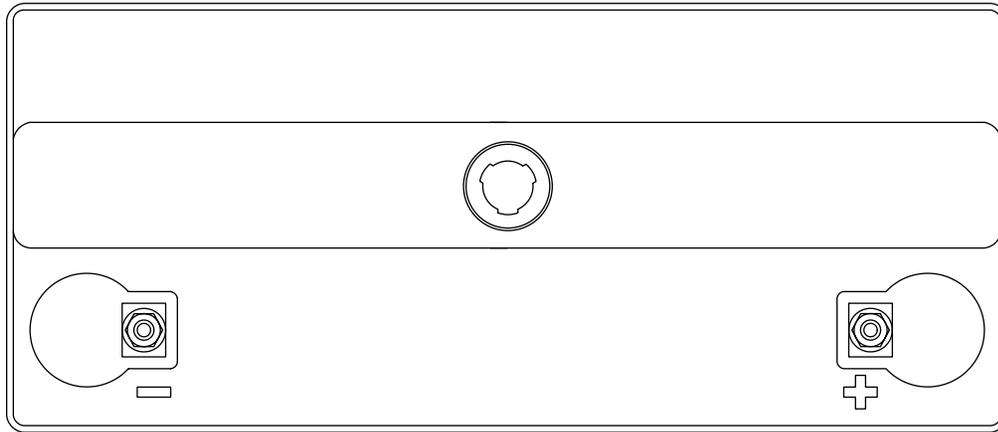
Self Discharge Rate
3% Per Month at 25°C (77°F)

Vibration Test No Loss in Capacity or Performance
2000 Cycles Per Minute, 2.5 mm (0.10 Inch) Excursion, 2 Hours



Constant Voltage Recharge Methods and Notes

- Cyclic Application Recharge**
- Charge between 14.4 to 14.7 Volts DC. (2.4 to 2.45 Volts Per Cell.)
 - Limit Initial Recharge Current to 12.5 Amperes or less. (Minimum Recommended is 5 Amperes.)
(Higher charge currents may be used for Rapid recharge, provided a Heat Protection and/or Safety System is used - Consult with us.)
 - Remove from Charge or switch to Standby Charge when Current draw falls to about 500 mA.
 - When Recharge Voltage requires Temperature Compensation, use the coefficient of - 5mV / °C / Cell. Derate from 25°C and 2.45 VPC.
- Standby Application Recharge**
- Charge between 13.5 to 13.8 Volts DC. (2.25 to 2.3 Volts Per Cell.) 13.65 Volts DC or 2.275 VPC is recommended for maximum life.
 - When Recharge Voltage requires Temperature Compensation, use the coefficient of - 3mV / °C / Cell. Derate from 25°C and 2.275 VPC.
- Temperature Compensation**
- Employ Charge Voltage Temperature Compensation when the battery temperature is less than 5°C or greater than 35°C.



GS Superlac SE Series		
Rechargeable Sealed Lead-Acid (VRLA) Battery		
Model:	SE50-12	
Voltage:	12	Capacity: 50 Ah (20 Hr)
Terminal:	Threaded Post (M6)	
Dimensions:	mm (Inch)	
Drawing:	SE50-12J-0109CE	
Date:	2001.09.21	
© Japan Storage Battery Co., Ltd.		
DO NOT SCALE DRAWING		

