



GEL Technology
GFMJ Series

Complying standards:

IEC60896-21/22: 2004
DIN43539-T5
IEC61427-2014

6FMJ-50
12V50Ah(10hr)



ABT-GFMJ introduce VRLA battery Gel technology, gel electrolyte design, Thick positive Flat plate technology and patent gel electrolyte compounding and filling technique guarantee battery long service life and super high reliability. They are widely used in telecommunication, power supply system, energy storage, UPS and EPS system, etc.

Mechanical Characteristics

	SI Unit	EN Unit
Length	276mm	10.87inch
Width	174mm	6.85inch
Height	169mm	6.65inch
Total Height	198mm	7.80inch
Approx. Weight	20.5kg	45.1lbs

Type of material for container and lids:
ABS Standard (FV0 Optional)

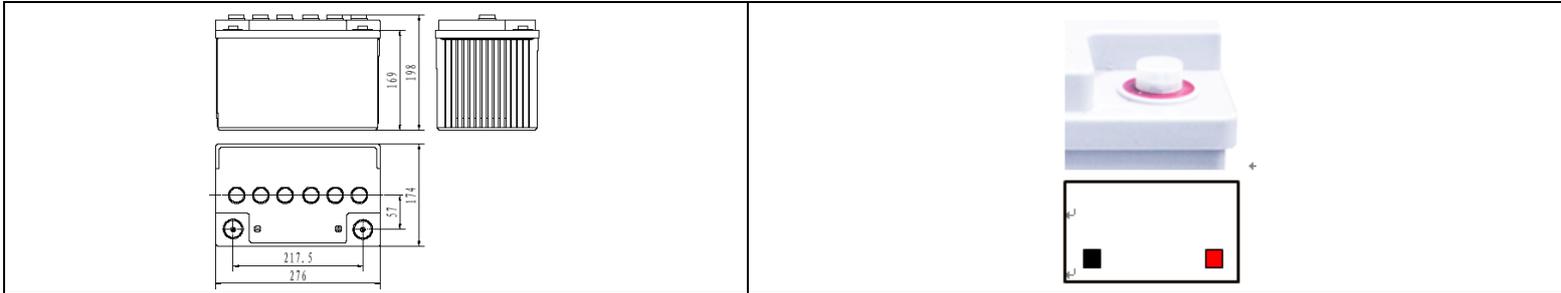
Product Characteristics

- 12 years life expectancy in float service at 68°F (20°C)
- Long life according to EUROBAT Classification
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC-SiO₂ micro-porous separator ensure Low self-discharge rate
- Easy installation and handling

Performance Characteristics

- Rated voltage: 12V (6 cells)
- Rated capacity at 68°F (20°C)
 - 10h rate (5.0A, 10.8V) 50Ah
 - 5h rate (8.5A, 10.8V) 42.5Ah
 - 1h rate (26.92A, 10.8V) 26.92Ah
- Internal resistance:
 - 7.64mΩ when fully charged at 68°F (20°C)
- Average self-discharge rate:
 - ≤2% per month 68°F (20°C)
- Maximum discharge current:
 - 718A(3s) at 68°F (20°C)
- Working temperature range:
 - Discharge: -20~55°C
 - Charge: -10~55°C
 - Storage: -20~55°C
- Charging method:
 - with constant voltage at 68°F (20°C)
 - Maximum charge current: 10A
 - Temperature compensation: -21mV/°C/piece
 - Cycle use: 14.10V/ piece
 - Standby use: 13.44V/ piece

Dimensions/Terminal



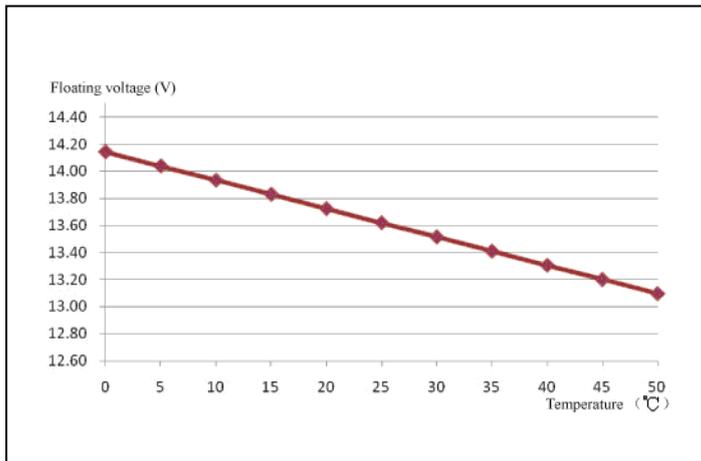
Constant Current Discharge Data (Ampere at 20°C/68 °F)

End Volt	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.60	78.00	49.98	34.88	29.48	22.45	17.53	13.68	10.95	9.31	8.480	6.570	5.475	2.820	2.380	1.185	0.570	0.545	0.285
1.65	75.65	48.98	34.18	28.89	22.01	17.18	13.41	10.73	9.12	8.315	6.440	5.365	2.760	2.335	1.160	0.565	0.540	0.280
1.70	73.35	48.00	33.50	28.32	21.57	16.85	13.13	10.52	8.94	8.150	6.310	5.255	2.705	2.290	1.145	0.560	0.535	0.275
1.75	71.20	47.04	32.78	27.75	21.13	16.50	12.86	10.31	8.75	7.985	6.185	5.150	2.655	2.245	1.125	0.555	0.530	0.270
1.80	67.65	45.63	31.85	26.92	20.50	16.01	12.50	10.00	8.50	7.750	6.000	5.000	2.600	2.200	1.110	0.550	0.525	0.265

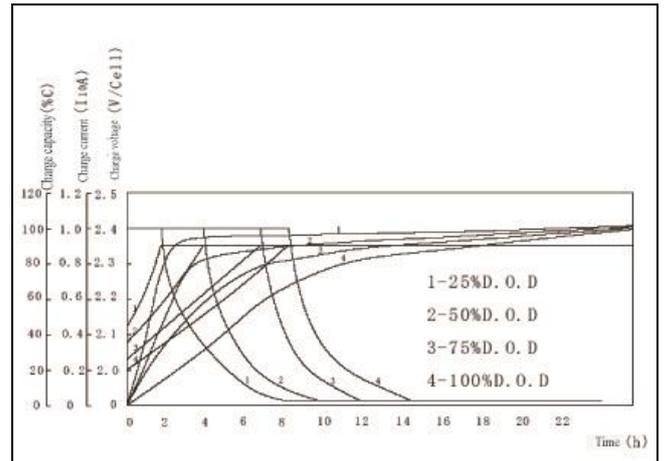
Constant Power Discharge Data (Watts per cell at 20°C/68 °F)

End Volt	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.60	136	87.46	61.04	51.88	39.51	30.85	24.49	19.93	17.04	15.43	12.09	10.18	5.414	4.617	2.323	1.134	1.090	0.576
1.65	133	86.69	60.50	51.42	39.39	30.75	24.41	19.74	16.87	15.38	11.98	10.14	5.354	4.577	2.297	1.130	1.085	0.568
1.70	131	85.92	59.97	50.97	39.03	30.67	24.15	19.45	16.72	15.32	11.93	10.09	5.302	4.557	2.279	1.126	1.081	0.561
1.75	129	85.61	59.66	50.51	38.88	30.53	23.92	19.28	16.54	15.25	11.88	10.04	5.230	4.490	2.250	1.121	1.076	0.554
1.80	126	84.41	58.91	50.06	38.54	30.41	23.75	19.10	16.41	15.11	11.76	9.90	5.200	4.422	2.231	1.117	1.071	0.546

Floating Charge Voltage vs. Temperature



Cycle charge characteristic curve (at 20°C/68 °F)



Contact information

Advanced Battery Technology BV
 Add. New Yorkstraat 14 1175 RD Lijnden Amsterdam, Netherland
 Web: <http://www.abtbatt.com> Email: sales@abtbatt.com

ABT VRLA Battery: Available power range from 26Ah to 3000Ah.

Copy right ABT BV,
 all rights reserved.
 (Edition: Feb.,2021)