



MWLD 12-12L

VRLA AGM Battery 12V/12Ah

■ Features:

- VRLA (AGM) technology – maintenance-free
- Dedicated to standby and cyclic operation
- High corrosion resistant performance: Pb-Ca multi-alloy grid

■ Application:

- Emergency power supply (UPS, emergency lighting)
- Telecommunications system



ELECTRICAL SPECIFICATION

Nominal voltage	12V			
Rated capacity	10hr	$C_{20} = 12\text{Ah} \pm 4\%$	$I_{20} = 0.60\text{A}$	$U_{20} = 10.5\text{V}$
	3hr	$C_3 = 9.33\text{Ah} \pm 4\%$	$I_3 = 3.11\text{A}$	$U_3 = 10.5\text{V}$
	1hr	$C_1 = 7.92\text{Ah} \pm 4\%$	$I_1 = 7.92\text{A}$	$U_1 = 9.60\text{V}$

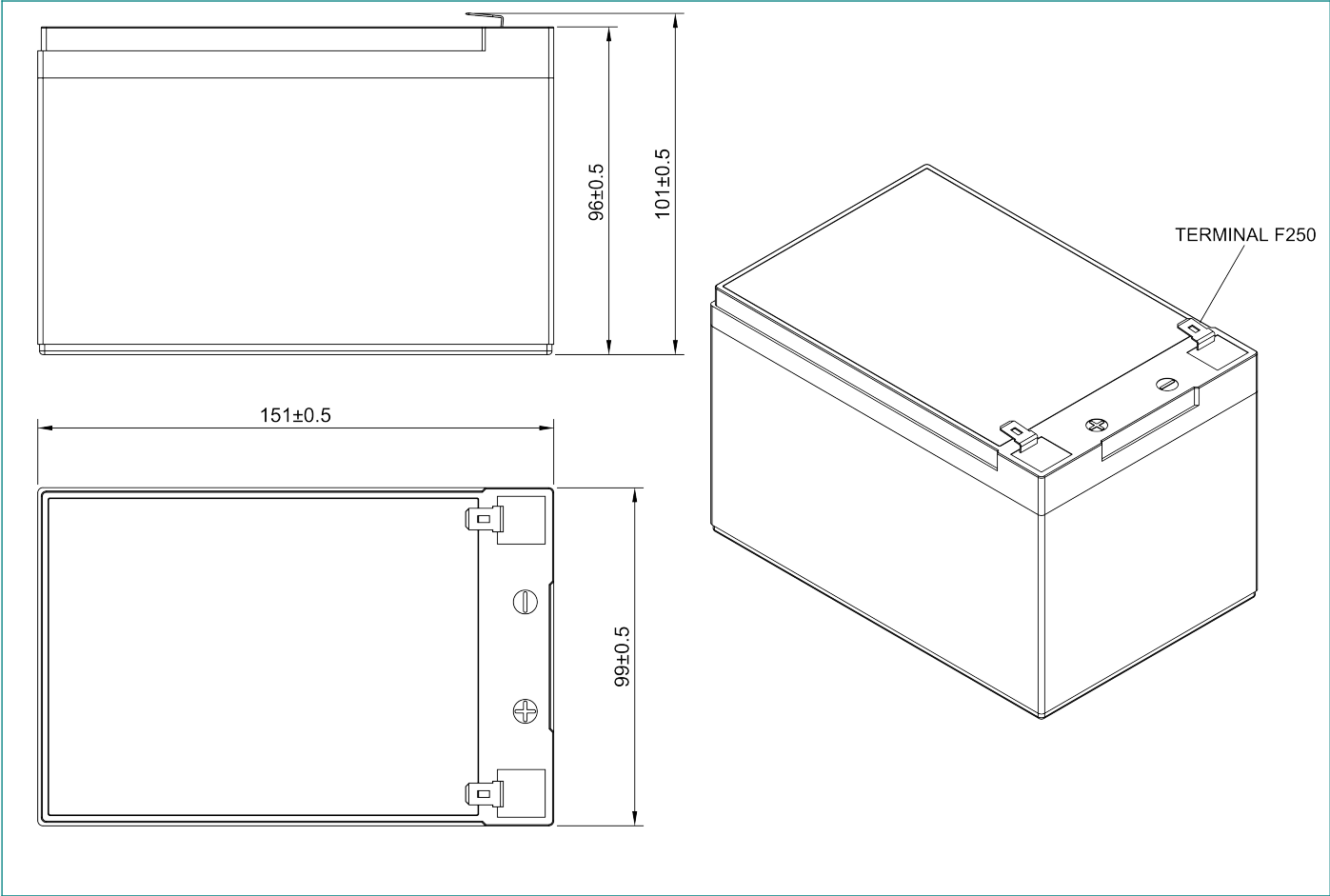
Internal resistance	Fully charged	$< 18\text{m}\Omega$
Self-discharge (25°C)	1 month	3%
Float charge	Charge voltage	$13.5 \div 13.8\text{VDC}$, 13.8V (recom.)
	Temperature compensation	$-18\text{mV}/^\circ\text{C}$
Cycle charge	Charge voltage	$14.4 \div 15.0\text{VDC}$, 14.7V (recom.)
	Temperature compensation	$-30\text{mV}/^\circ\text{C}$
Charge current	3.00A (max.)	1.20A (recom.)
Discharge current (max.)	180A (5s)	

OPERATING TEMPERATURE RANGE

Discharge	$-20^\circ\text{C} \div +50^\circ\text{C}$
Charge	$-20^\circ\text{C} \div +50^\circ\text{C}$
Storage	$-20^\circ\text{C} \div +50^\circ\text{C}$

MECHANICAL SPECIFICATION

Dimensions (Container ABS)	Length (L)	151 ± 0.5mm
	Width (W)	99 ± 0.5mm
	Height (H1)	96 ± 0.5mm
	Total height (H2)	101 ± 0.5mm
Netto weight	3.40kg (± 5%)	
Terminal	FASTON F250	





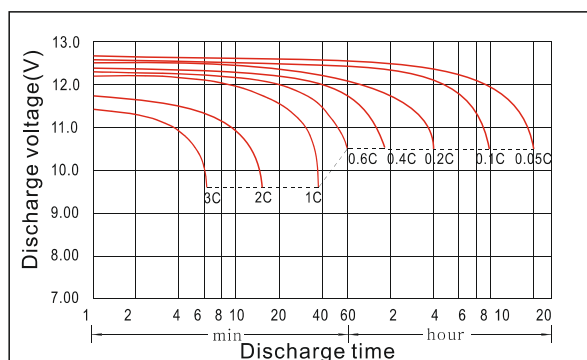
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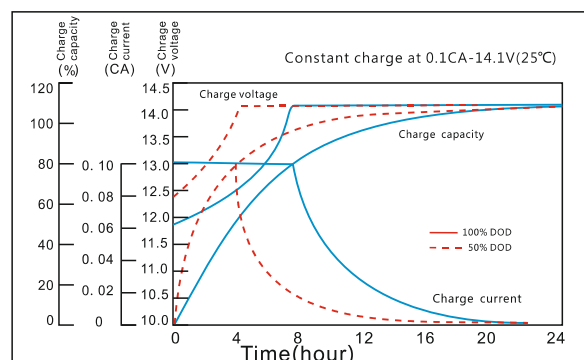
Cut off voltage	CONSTANT CURRENT DISCHARGE CHARACTERISTICS [A] (25°C)											
	5'	10'	15'	30'	1h	2h	3h	4h	5h	8h	10h	20h
9.6V	47.5	31.1	23.2	15.2	7.92	4.54	3.31	2.65	2.26	1.49	1.19	0.636
9.9V	47.2	29.8	21.2	14.4	7.44	4.36	3.22	2.57	2.21	1.46	1.18	0.624
10.2V	38.6	28.0	19.8	14.0	7.20	4.27	3.16	2.44	2.18	1.44	1.15	0.612
10.5V	35.9	26.6	18.5	13.6	6.95	4.16	3.11	2.40	2.09	1.40	1.13	0.600
10.8V	33.0	25.1	17.2	13.2	6.71	4.06	2.94	2.35	2.00	1.37	1.10	0.576

Cut off voltage	CONSTANT POWER DISCHARGE CHARACTERISTICS [W] (25°C)											
	5'	10'	15'	30'	1h	2h	3h	4h	5h	8h	10h	20h
9.6V	89.2	56.0	42.4	25.6	14.5	8.50	6.26	5.02	4.26	2.81	2.30	1.26
9.9V	82.2	53.0	39.8	25.5	13.7	8.18	6.08	4.86	4.18	2.77	2.26	1.23
10.2V	75.2	51.4	38.0	25.4	13.2	8.02	5.98	4.62	4.06	2.74	2.24	1.22
10.5V	68.2	49.8	36.6	25.1	12.9	7.84	5.90	3.98	3.98	2.63	2.19	1.19
10.8V	61.2	48.2	35.0	24.9	12.7	7.78	5.74	3.88	3.88	2.54	2.14	1.18

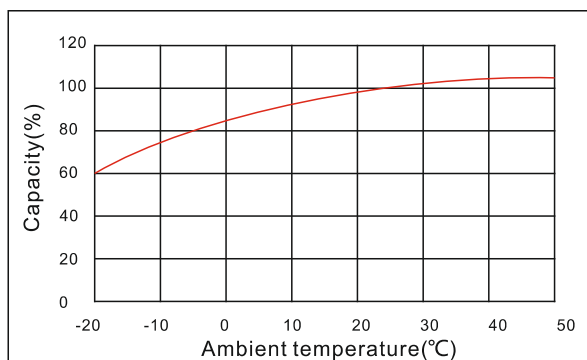
DISCHARGE CHARACTERISTIC



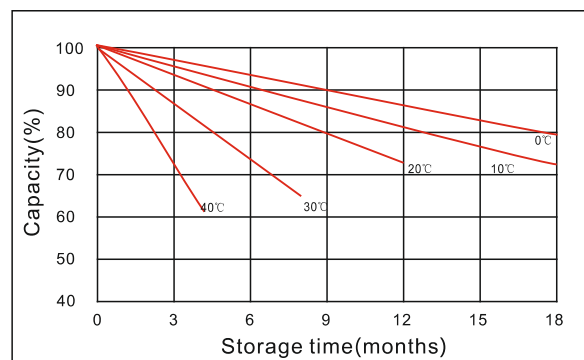
CHARGING CHARACTERISTIC



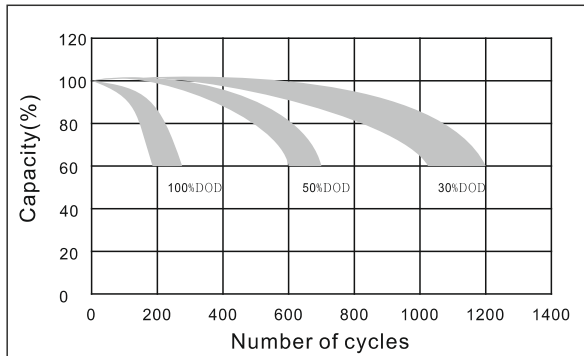
THE EFFECT OF TEMPERATURE ON CAPACITY



CURVES OF SELF-DISCHARGE



THE EFFECT OF DISCHARGE DEPTH ON CYCLE LIFE



THE EFFECT OF TEMPERATURE ON FLOAT LIFE

