

# TN12-5.5 [12V 5.5Ah]



## Product Features

General Purpose (AGM)		3~5 years of design life@25°C	
100% Model Coverage Both Cycle & Float Application	↑98% Capacity Retention High Purity Electrolyte	↑20% Charge Acceptance Special Negative Additive	↓50% Grid Corrosion Rare-earth patent alloy



## Product Applications



## Physical Specifications

Model	Dimensions (mm/inch)				Weight (kg/lbs)	Terminal	Container
TN12-5.5	Length	Width	Height	Total Height	1.85/4.08	T1/T2	ABS UL94-HB (Optional: FR ABS UL94-V0)
	90/3.54	70/2.76	101/3.98	107/4.21			

## Product Specifications

Nominal Voltage	Rated Capacity@25°C/77°F	Internal Resistance	Max. Discharge Current	Operating Temp. Range
12V	5.50Ah 20hr Rate (1.80V/cell) 5.21Ah 10hr Rate (1.80V/cell) 4.57Ah 5hr Rate (1.75V/cell) 3.99Ah 3hr Rate (1.70V/cell)	25mΩ@25°C/77°F	82.5A (5s)	Discharge:-15~50°C (5~122°F) Charge:0~40°C (32~104°F) Storage:-15~40°C (5~104°F) Optimum:25±2°C (77±4°F)

## Constant Current Discharge (A)@25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	17.8	11.5	9.61	7.90	5.52	3.83	2.98	1.69	1.23	1.01	0.870	0.759	0.614	0.509	0.271
1.80V/cell	19.2	12.2	9.99	8.09	5.66	3.92	3.06	1.72	1.26	1.04	0.892	0.781	0.630	0.521	0.275
1.75V/cell	19.9	12.5	10.2	8.29	5.80	4.03	3.13	1.76	1.30	1.06	0.914	0.798	0.646	0.532	0.282
1.70V/cell	20.6	12.8	10.5	8.50	5.93	4.15	3.22	1.81	1.33	1.09	0.937	0.822	0.665	0.545	0.287
1.67V/cell	21.2	13.2	10.7	8.72	6.05	4.24	3.29	1.86	1.37	1.12	0.959	0.837	0.675	0.552	0.292
1.60V/cell	21.8	13.8	11.1	9.00	6.23	4.34	3.38	1.93	1.41	1.15	0.982	0.860	0.692	0.566	0.298

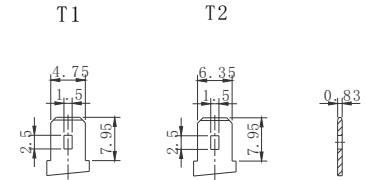
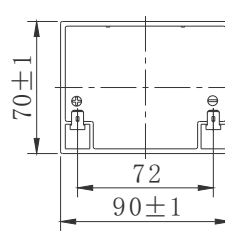
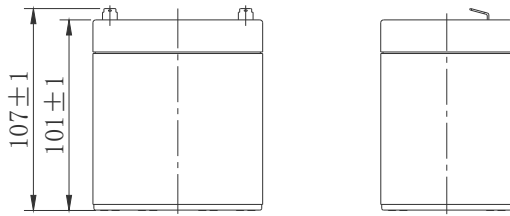
## Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.1	21.9	18.4	15.3	10.9	7.60	5.94	3.39	2.49	2.06	1.77	1.55	1.26	1.04	0.559
1.80V/cell	35.7	23.0	19.1	15.6	11.1	7.76	6.07	3.44	2.55	2.10	1.81	1.59	1.29	1.07	0.565
1.75V/cell	36.9	23.6	19.5	16.0	11.3	7.94	6.20	3.52	2.61	2.15	1.85	1.62	1.32	1.09	0.578
1.70V/cell	38.2	24.1	19.8	16.3	11.6	8.18	6.37	3.61	2.67	2.20	1.89	1.67	1.35	1.11	0.586
1.67V/cell	39.1	24.7	20.2	16.7	11.8	8.32	6.49	3.69	2.73	2.24	1.93	1.69	1.37	1.12	0.595
1.60V/cell	40.2	25.7	20.9	17.1	12.1	8.49	6.63	3.82	2.80	2.30	1.97	1.73	1.40	1.14	0.603

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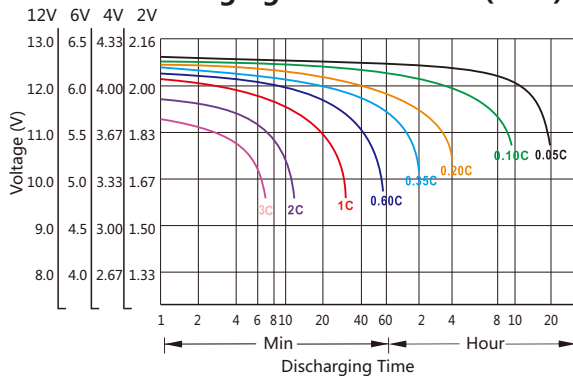


## Battery Dimensions(mm)

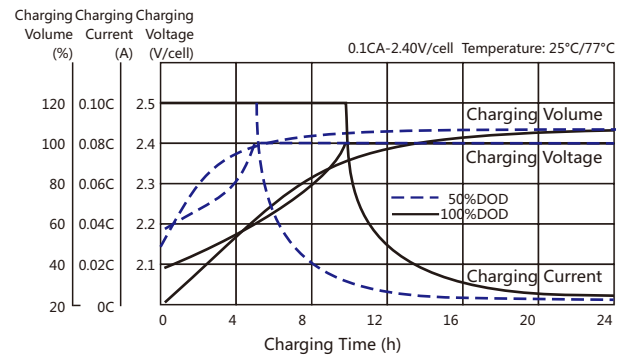


## Electrical Characteristics

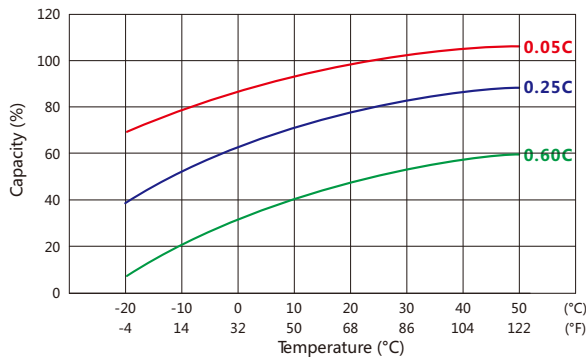
### Discharging Characteristics(25°C)



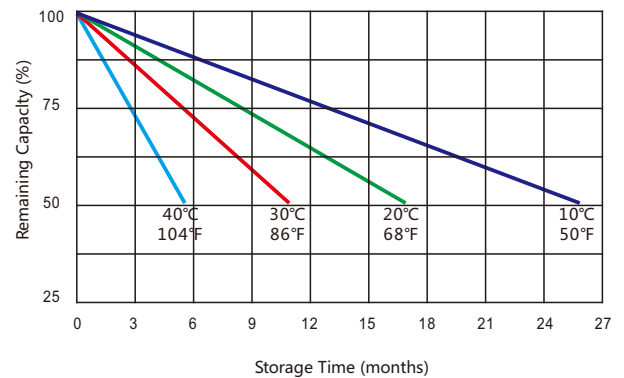
### Charging Characteristics(25°C)



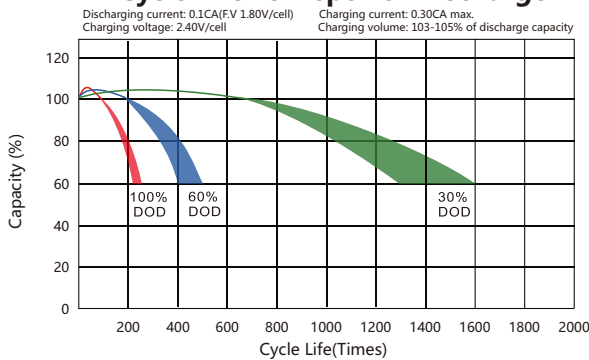
### Capacity vs Temperature



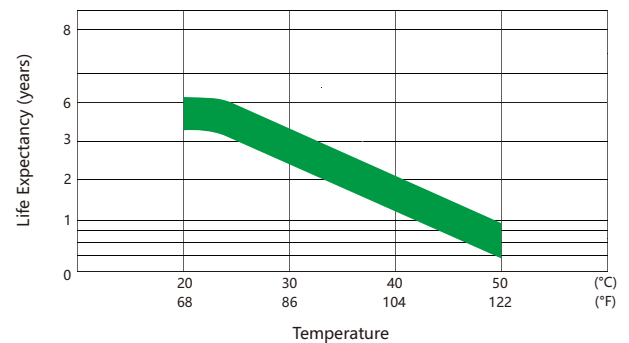
### Self-discharge vs Time



### Cycle Life vs Depth of Discharge



### Floating Life vs Temperature



## Usage and Maintenance

Charge Current	Equalization Charge	Float Charge
Limited current : $\leq 0.3C_{20A}$	Constant Voltage: 14.4~14.7V@25°C(77°F) Temp.Coefficient:-24mV/°C	Constant Voltage: 13.5~13.8V@25°C(77°F) Temp.Coefficient:-18mV/°C