NIMH - TECHNICAL DATA SHEET - MODEL ESP3000SCH

TECHNICAL DATA SHEET

ESP3000SCH

Battery General Specification :

Model - ESP3000SCH
Chemical Material - Nickel Metal Hydride.
Description - 1.2v Rechargeable battery Sub C size.

Discharging:

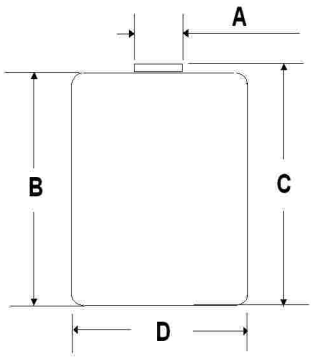
(A) Discharge current.

1/ Discharged at 0.2CA, Provide 80% at EPV 1.2V 98% of nominal capacity at EPV 1.1V.
2/ Discharged at 0.5CA, Provide 70% at EPV 1.2V 95% of nominal capacity at EPV 1.1V.
3/ Discharged at 1CA, Provide 60% at EPV 1.2V 93% of nominal capacity at EPV 1.1V.
4/ Discharged continuously at 1C, for 2 hours, No explosion or leakage.

(B) Capacity and Cycle (500 to 800 cycles)
Charge at 0.1C, discharge at 0.2C; 100% nominal capacity.
Charge at 1C, discharge at 1C; minimum 95% nominal capacity.

Physical and Electrical Specifications.

DIMENSIONS WITH SLEEVE



A	10.0mm +/- 0.2mm
B	42.0mm +/- 0.2mm
C	42.5mm +/- 0.2mm
D	22.0mm +/- 0.2mm

Nominal Voltage			≥ 1.2v
Nominal Capacity			≥ 3000mAh
Weight			≥ 56g
Internal resistance.			≤ 12mΩ
Charge	Standard		300mA x 15hrs
	Quick		900mA x 4hrs
	Rapid		(see note below)
Discharge	300mA (0.1c)		≥ 64min
	550mA (0.2c)		≥ 60min
Ambient temperature	Charge	Standard	0o to 45oC
		Quick	0o to 40oC
	Discharge		-20o to 65oC
	Storage		-20o to 45oC

Discharge Temperature at 0.2CA

1/ At 20^{0}C, 100% nominal capacity.
2/ At 0^{0}C, 90% nominal capacity.
3/ At 60^{0}C, 0r -20^{0}C, 85% nominal capacity.
4/ Charge retention for 30 days at 20^{0}C, cell can provide 70% nominal capacity discharged at 0.2CA.

Note on rapid charge.
There will be no danger in charging at 0.67C or 1.5 Hours.
But there is a possibility it will shorten the cyclic life of the cell.
Suggested quickest charge rate is of 0.3C

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