



ENGLISH

Datasheet

1.2V NiMH Tagged Terminal CS NiMH Rechargeable Battery, 2200mAh

RS Stock number [476-2106](#)



Specifications

Capacity	2200mAh
Chemistry	NiMH
Dimensions	43.5 x 23mm
Maximum Continuous Current	440mA
Nominal Voltage	1.2V
Operating Temperature Range	0 → +70°C
Size	SC
Terminal Type	Tagged



Ratings:

Description	Unit	Specification	Conditions
Nominal Voltage	V/cell	<u>1.2</u>	Unit Cell
Nominal Capacity	mAh	<u>2200</u>	Standard Charge/Discharge
Nominal Dimension (with sleeve)	mm	Φ=23 max. H=43.5 max.	Unit Cell
Weight Approx.	g	<u>52</u>	Unit Cell
Standard Charge	mA	<u>220</u> (0.1C)	T=0~45°C
	hour	<u>15</u>	
Fast Charge	mA	<u>660</u> (0.3C)	Tmax=55°C -ΔV=5mV/cell ΔT/Δt≤0.5°C/min Timer CutOff=120%
	hour	<u>4</u>	
Trickle Charge	mA	<u>110~132</u> (0.05C~0.06C)	T=0~70°C
Standard Discharge	mA	<u>440</u> (0.2C)	T= 0~70°C Cut-off Voltage=1.0V/Cell
Storage Temperature	°C	<u>-30 ~35</u>	Charge State

Performance and Test Methods:

Unless otherwise stated, tests should be done within one month of delivery.

Under the following conditions:
Ambient Temperature, T : 20±5°C
Relative Humidity, : 65±20%

Note 1 : Standard Charge/Discharge Condition:
Charge : 220 mA (0.1C) ×15hrs
Discharge : 440 mA (0.2C) to 1.0V/cell



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Test	Unit	Specification	Conditions	Remarks
Capacity	mAh	≥ 2200	Standard Charge/Discharge	Up to 5 cycles are allowed
Open circuit voltage(CCV)	V/Cell	≥ 1.25	Within 1 hour after standard charge	
Internal Impedance	m Ω /Cell	≤ 15	Upon fully Charge (1KHZ)	Unit cell
Discharge at 1CmA	Minute	≥ 54	Standard Charge, 1 hour rest before discharge	
Overcharge	N/A	No leakage nor explosion	110mA (0.05C) charge 28 days	
Reverse charge	N/A	Leakage & deformation may occur, but no explosion is allowed	0.2CmA discharge to 0V, then reverse charge with 1CmA for 1 hour	
Charge Retention	mAh	$\geq 1430(65\%)$	Standard charge, Storage: 28 days, Standard Discharge	
IEC Cycle Life	Cycle	See note.2	IEC61436 (1999) 4.4.1	
Short circuit	N/A	Leakage & deformation may occur, but no explosion is allowed	After standard charge, short circuit for 1 hour. (load $\leq 100\text{m}\Omega$ for 24hrs)	
Mechanical test	hour	t(duration of discharge) ≥ 5	Charge the battery 0.1CmA 15hrs, carry out bump test under the following condition: Peak acceleration(A): 98m/s^2 (10G) Corresponding duration of pulse(D) 16ms Corresponding velocity change 1.00m/s Number of bumps 1000 ± 10 Then stand for 1~4hrs, Discharge at 0.2CmA	



External Appearance

The cell/battery shall be free from cracks, scars, breakage, rust, discoloration, leakage and deformation.

Caution

1. Reverse charge is not acceptable.
2. Charge before use. The cells/batteries are delivered in an uncharged state.
3. Do not charge/discharge with more than specified current.
4. Do not short circuit the cell/battery.
5. Do not incinerate or mutilate the cell/battery.
6. Do not solder directly to the cell/battery.
7. The life expectancy may be reduced if the cell/battery is subjected to adverse conditions like: extreme temperature, deep cycling, excessive overcharge/over-discharge.
8. Store the cell/battery uncharged in cool dry place. Always discharge batteries before bulk storage or shipment.

Cycle number	Ambient temperature	Charge	Discharge	Minimum Discharge duration
1	55°C ± 2°C	0.0625CmA for 24h	0.2CmA to 1.0V	3h45min
2		0.0625CmA for 24h	0.2CmA to 1.0V	3h45min
3	70°C ± 2°C	0.0625CmA for 48h	0.2CmA to 1.0V	No requirement
4	55°C ± 2°C	0.0625CmA for 24h	0.2CmA to 1.0V	3h45min
5		0.0625CmA for 24h	0.2CmA to 1.0V	3h45min

Dimensional Drawing

