



LITHIUM BATTERY

2 CR5

SPECIFICATION

Approved by  Date: 5/24/02
Prepared by  Date: 5/24/02

Nov,2001

MATSUSHITA BATTERY INDUSTRIAL CORPORATION OF AMERICA
LITHIUM BATTERY DIVISION

1. Designation	: 2CR5
2. Nominal Voltage	: 6 V
3. Nominal Capacity	: 1550 mAh
	Load : 200 Ω at 20°C
	Cut Off V : 4.0 V
4. Max. Continuous Discharge Current	: 1000 mA at 20°C
5. Construction	
5. 1 Appearance, Dimensions	: There shall be no noticeable deformation. The dimensions shall be according to the attached drawings.
5. 2 Weight	: Approx. 37g
6. Performance	
6. 1 Open Circuit Voltage	: Min. 6 V
6. 2 Duration 1. (at 20 \pm 2°C)	
6. 2. 1 Pulse Discharge Conditions	: Average 2000 cycles
Pulse Current	: 900 mA
One Cycle	: 3 seconds on, 27 seconds off
Cut Off V.	: 3.1 V
6. 3 Duration 2. (at - 20 \pm 2°C)	
6. 3. 1 Pulse Discharge Conditions	: Average 1100 cycles
Pulse Current	: 900 mA
One Cycle	: 3 seconds on, 27 seconds off
Cut Off V.	: 3.1 V
6. 4 Impedance	: Max.2.0 Ω
6. 5 Vibration Resistance	: Deterioration of performance shall not occur.
6. 6 Temperature Range	: Discharge -20 to 60 °C Storage -20 to 45 °C
6. 7 Leakage Resistance	: The battery shall not show leakage or salting which harms performance.

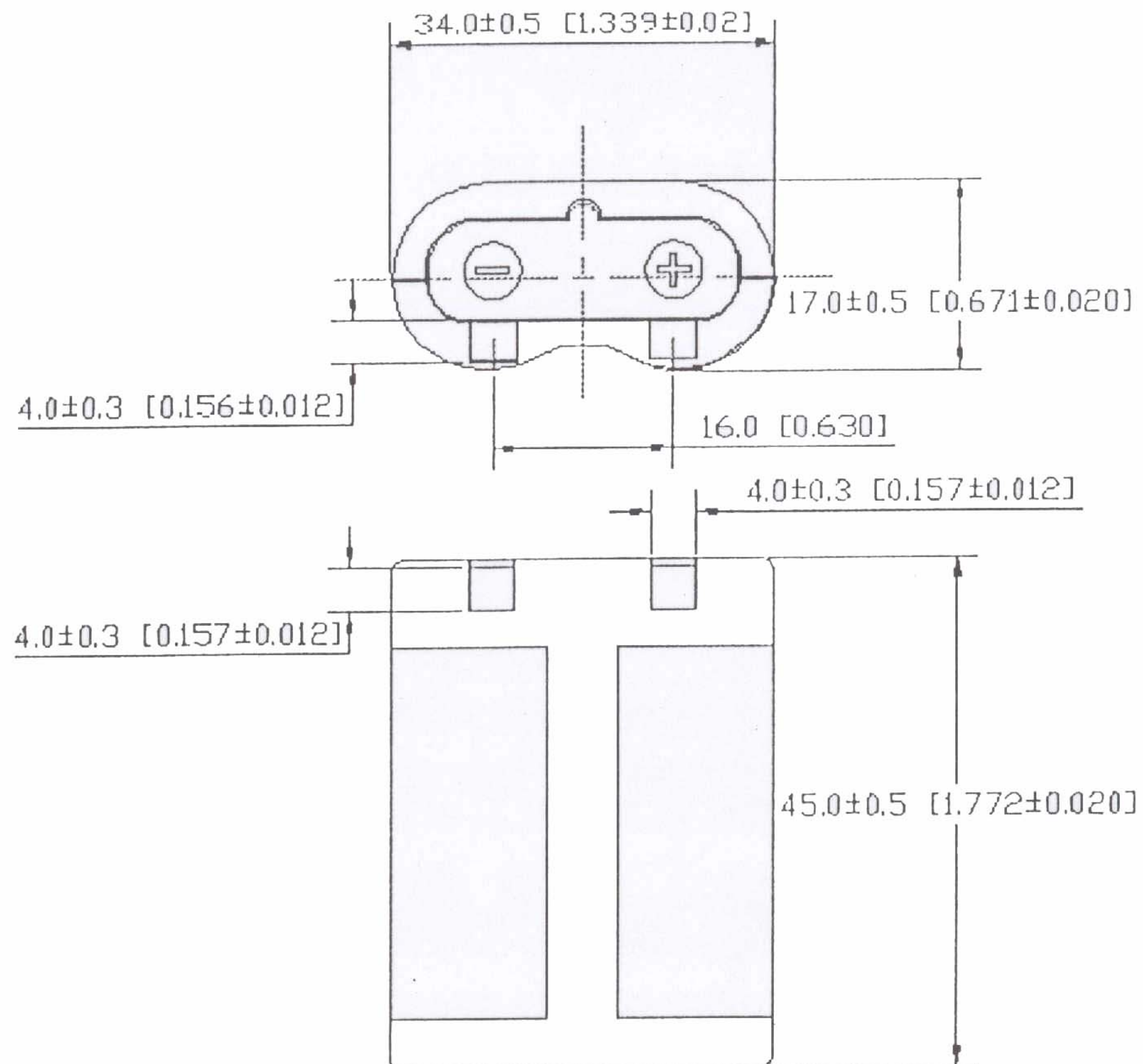
7. Test Conditions, Measuring Instruments and Measuring Methods

7. 1 Test Conditions : If not otherwise specified,
Temperature ; $25 \pm 5^{\circ}\text{C}$
Humidity ; $65 \pm 10\%$
7. 2 Measuring Instruments
- i) Volt Meter : Internal Impedance ; More than $10\text{M}\Omega$
Accuracy ; Less than 0.5%
- ii) Battery Impedance Meter : Sine wave A.C. method ; $1\text{ kHz } 0.1\text{mA}$
(National Digital milliohm Meter [VP-2811A])
- iii) Caliper : Accuracy ; Less than 1% by JIS
- iv) Balance : Sensitivity ; More than 100 mg
7. 3 Measuring Method
- i) Outer Dimensions : This shall be measured with the caliper described in Item 7.2 iii).
- ii) Weight : This shall be measured with the balance described in Item 7.2 iv).
- iii) Appearance : Deformation or tarnish shall be visually checked.
- iv) Open Circuit Voltage : This shall be measured with the volt meter described in Item 7.2 i).
- v) Operating Time (Duration) : Operating time shall be measured with cycles until terminal voltage reaches the specified cut -off voltage.
- vi) Battery Impedance : This shall be measured by the meter described in Item 7.2 ii).
- vii) Vibration Resistance : Amplitude ; 2 mm
Number of Vibrations ; 1000rpm .
Directions ; X, Y, Z
Time; 30 minutes in each direction
- viii) Leakage Resistance : Heat cycle test
: Leakage, appearance and outer dimension shall be checked after 10 cycles according to MIL-STD -202E-106D.
The battery shall be kept in a dry place. It should not show any dew point when stored in this condition.

8. Precautions for use

- 1) A battery shall not be stored at temperatures in excess of 45 °C. Storage at less than 30 °C is recommended. Storage at less than -20 °C can deform the plastic parts and may cause leakage. To prevent self-discharge caused by corrosion, or decrease of insulation, humidity during storage shall be less than 70 %.
- 2) The battery has an explosion resistant construction. But the following cautions should be taken, because combustible materials such as lithium metal and organic electrolyte are contained in the battery.
 - * Do not short circuit.
 - * Do not dispose in fire.
 - * Do not charge.
 - * Do not disassemble.
 - * Do not mix fresh batteries with used batteries or other battery types.
- 3) Keep away from heat source or flame.
- 4) The battery shall not be washed by ultrasonic wave washer.

2CR5 Product Drawing



Voltage	:	6V
Cells	:	CR-2/3A two in series with lead (a PTC is built-in each cell)
Terminals	:	Flat Contacts
Jacket	:	Plastic Case

Remarks

- * The heights of overlapped portion is not specified
- * PTC device is installed inside

unit : mm (inch)

Scale : none

Product Type : Lithium Battery

Approved by: *Sethy Seta* Date: 11/15/01