

Technical Data Coin-type Manganese Dioxide Lithium Battery

Type: CR1616

Made in China

2020/04/21

TOSHIBA LIFESTYLE PRODUCTS & SERVICES CORPORATION

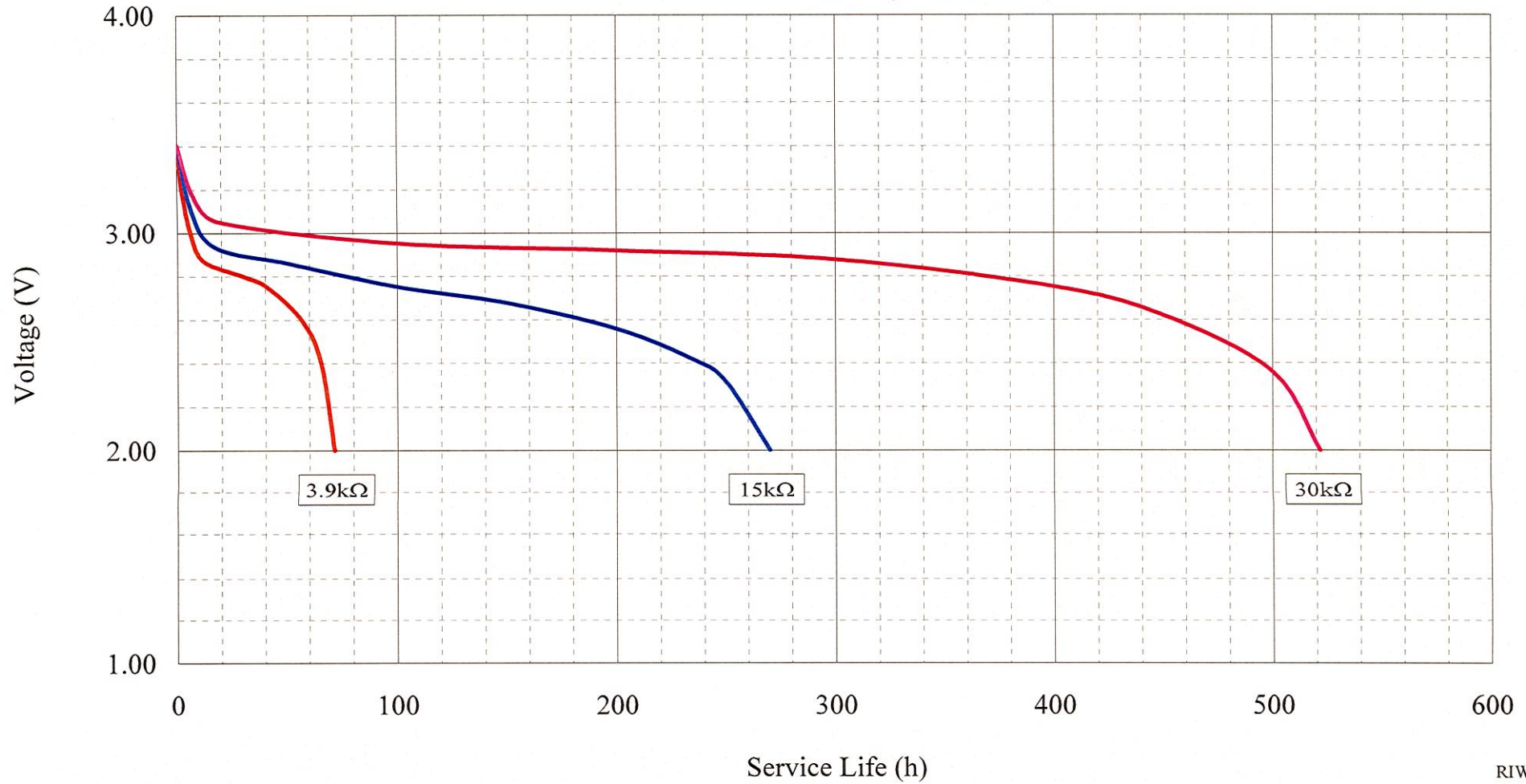
Ratings

| | | |
|----------------------------------|----------------|--|
| Battery system | | Coin-type Manganese Dioxide Lithium Battery |
| Item | | |
| Battery type | | CR1616 |
| Nominal Voltage | | 3.0V |
| Standard Capacity [Condition] | | 50 mAh [on continuous discharge under 30k Ω load to 2.0V end-point at 20deg.C] |
| Terminals | Cap Terminals | SUS + Ni plate |
| | Base Terminals | SUS + Ni plate |
| Outer dimensions | Diameter | φ16.0(0/-0.3)mm |
| | Overall height | 1.6(0/-0.2)mm |
| Usable temperature range | | -20 ~ 65deg.C |
| Storage temperature range | | |

This is only for reference.(not guaranteed.) This information contained herein may be changed without prior notice.

CR1616 Discharge Characteristics

Test condition : cotinuous discharge, Initial, 20deg.C



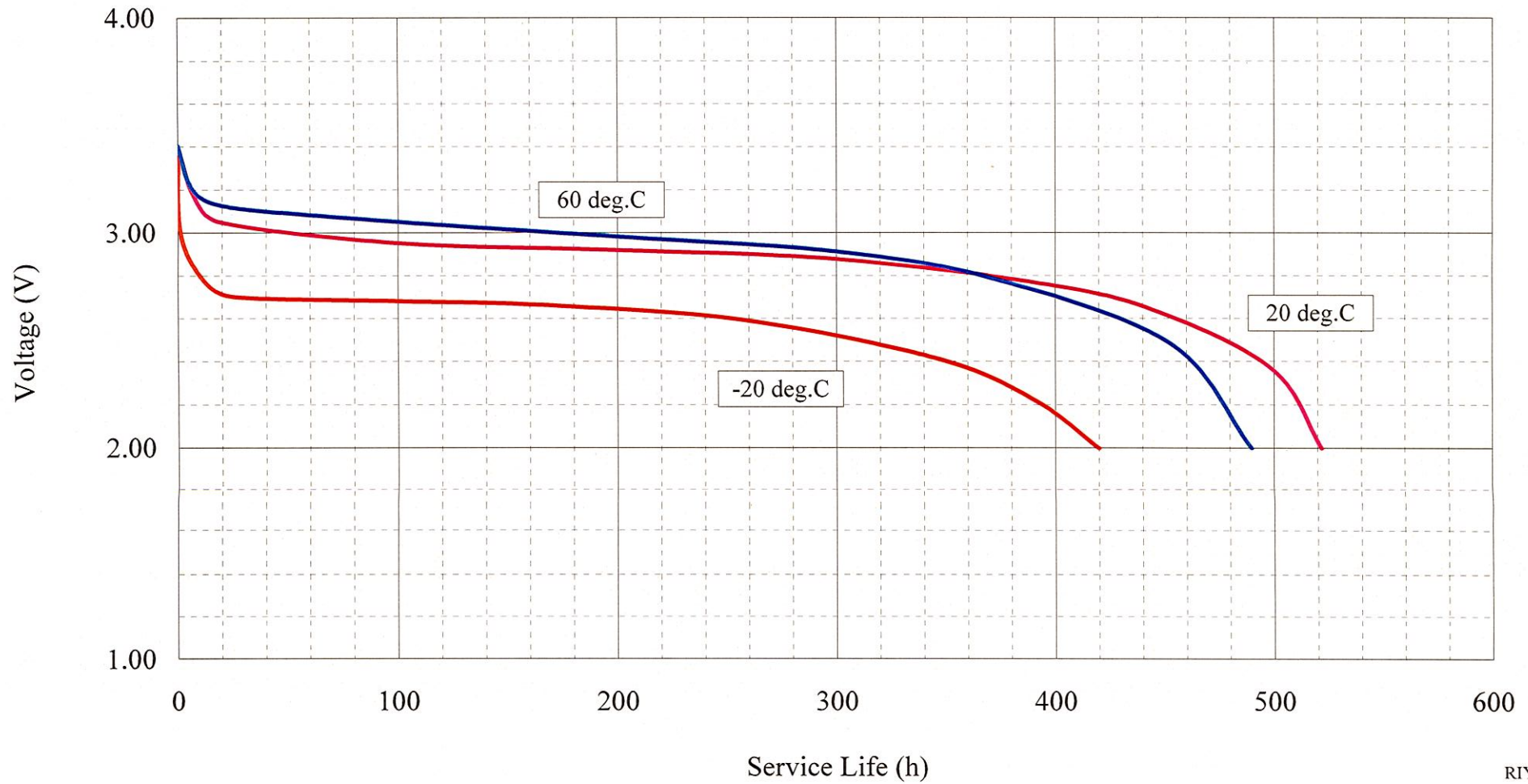
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CR1616 Discharge Characteristics

Test condition: 30kΩ continuous discharge, Initial



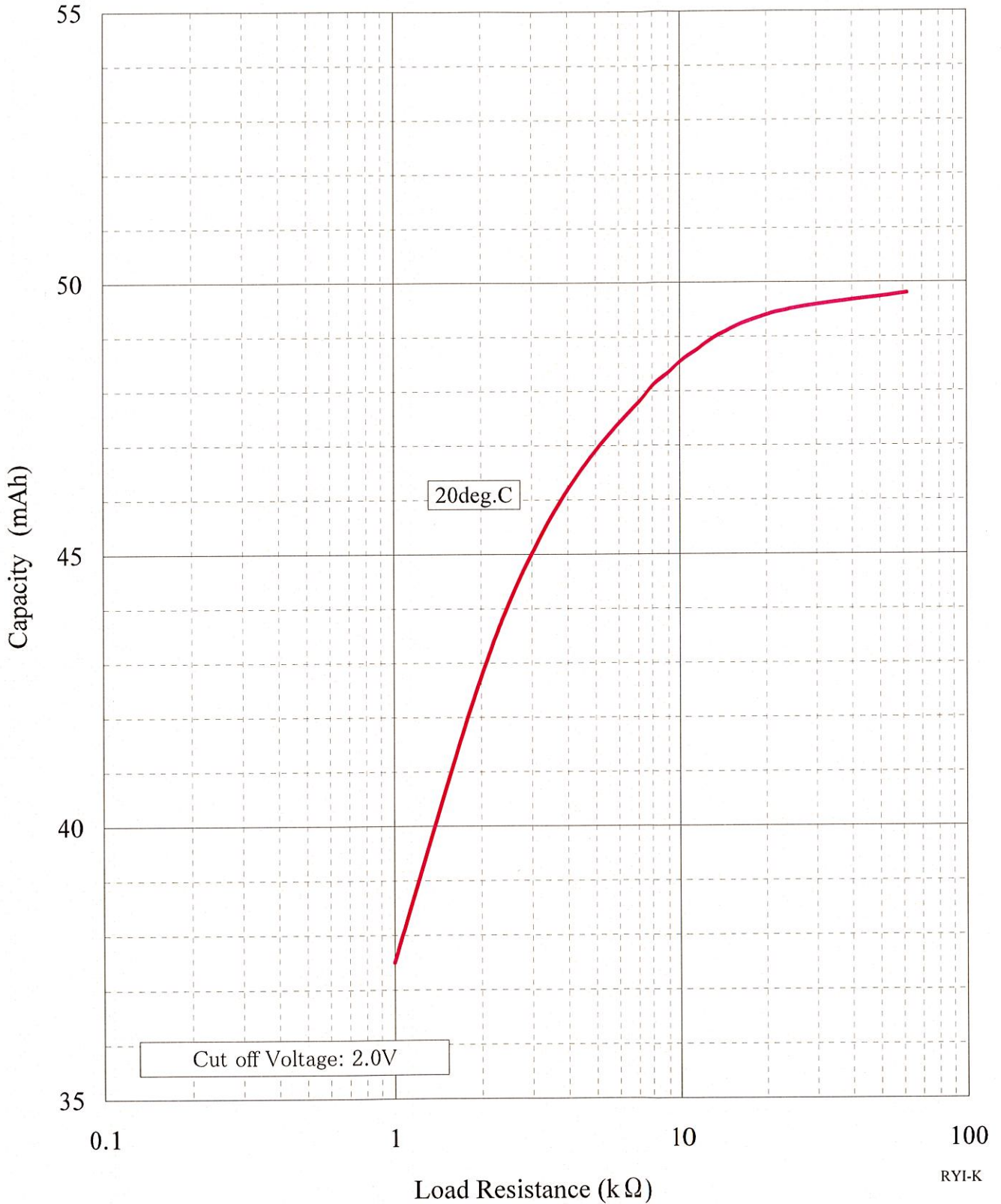
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CR1616 Load Resistance vs Capacity

Test condition : Initial, 20deg.C



RYI-K

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CR1616 Safety Evaluation Test

| | n | Conditions | Requirements |
|--------------------|---|---|---|
| Vibration test | 5 | Amplitude: 1.0mm Frequency: 10 to 55 to 10Hz Sweep: 1minute Period: 2h per each direction of X and Y axes, 4h in total | Open-circuit voltage is to be kept same as initial value. No abnormal appearance and no substandard dimensions are to be observed. |
| Weighing test | 5 | Weight of 19.8N(2kgf) is laid for 1 hour and 9.8N(1kgf) for 24 hours respectively on all over negative side of cells. | Open-circuit voltage is to be kept same as initial value. No abnormal appearance and no substandard dimensions are to be observed. |
| Drop test | 5 | Number of drops: 10 times Height: 75cm Floor: Concrete Direction: Free | Open-circuit voltage is to be kept same as initial value. No abnormal appearance and no substandard dimensions are to be observed. |
| Heat test | 5 | Cells are kept stored for 24hrs. Temperature: 80+/-2deg.C Humidity: 70%RH or less. | Open-circuit voltage is to be kept same as initial value. No abnormal appearance and no substandard dimensions are to be observed. |
| Temperature cycle | 5 | Temperature: -10deg.C ⇔ 60deg.C (4h/Cycle, 6cycle/day,20Day) | Open-circuit voltage is to be kept same as initial value. No abnormal appearance and no substandard dimensions are to be observed. |
| Short-circuit test | 5 | Cells are Short-circuited for 48 hours. | No burst, No fire |

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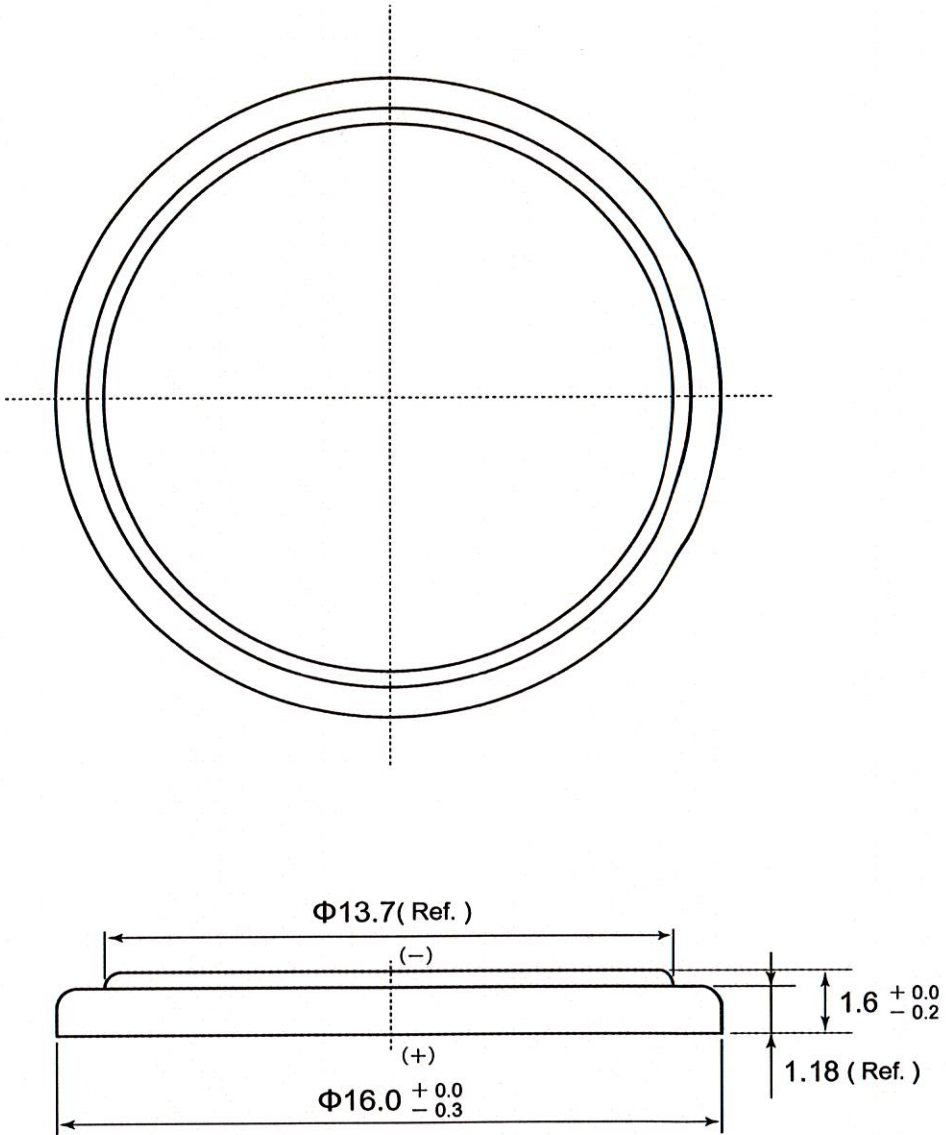
CR1616 Leakage Performance

| | | Test items | Electrolyte Leakage (%) | | | |
|---|---|----------------|-------------------------|--------|--------|--------|
| | | Storage period | 20days | 40days | 60days | 90days |
| Test condition | | | | | | |
| Storage at high temperature and high humidity | 45deg.C-70%RH | | 0 | 0 | 0 | 0 |
| | 60deg.C-90%RH | | 0 | 0 | - | - |
| Temperature cycle | Temperature : -10deg.C ⇔ 60deg.C (4h/Cycle, 6cycle/day,20Day) | | 0 | - | - | - |

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CR1616 Outline Drawing



Unit: mm

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