

### 1. Applicability

This specification is applicable to DiVolta Alkaline Battery, DA-LR03 Size AAA (Mercury and Cadmium Free)

### 2. GENERAL

2.1	Type designation	:	DA-LR03
2.2	Nominal voltage	:	1.5V
2.3	Shape and dimension	:	Refer to Drawing 1
2.4	Typical weight	:	12±1g
2.5	Shelf life	:	84 months
2.6	Date code	:	Unless otherwise specified, every battery will carry an expiry date code for 84 months. ( e.g. a battery manufactured on January 2005 will carry an expiry code of 01-12. )
2.7	Jacket	:	Foil jacket

### 3. APPEARANCE

There shall be no dirt, scratch or deformation detrimental to practical service in appearance.

### 4. ELECTRICAL CHARACTERISTICS (3.9Ω, 0.3S, 20±2°C)

/		OCV(V)	CCV(V)	S.C.(A) <i>(reference)</i>
Initial	Min	1.57	1.40	6.0
	Normal	1.60	1.45	8.0
Storage 1 year	Min	1.55	1.37	4.5
	Normal	1.57	1.40	6.0

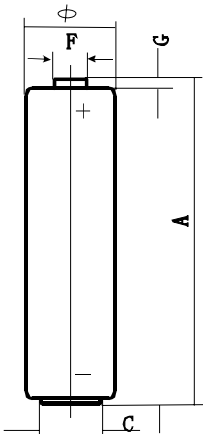
Note: storage condition: 20±5°C, RH: 45%-75%

### 5. SERVICE OUTPUT

Load		20Ω	3.6Ω	5.1Ω	10Ω	43Ω
Test mode		24h/d	15s/min	4min/h,8h/d	1h/d	4h/d
end voltage		0.9V	0.9V	0.9V	0.9V	0.9V
Initial	MAD	17.2 h	560cycles	190min	420min	67 h
	Normal	18.3 h	630cycles	220min	480min	72.5h
Storage 1 year	MAD	16.2 h	480cycles	160min	360min	65 h
	Normal	17.2 h	560cycles	190min	420min	69h

Note: storage condition: 20±5°C, RH: 45%-75%

### Drawing 1: Dimensions of Battery (LR03)



/	Min (mm)	Max (mm)
Φ	9.9	10.4
A	43.8	44.4
C	6.2	6.6
F	3.2	3.6
G	0.85	1.2

### 6. ELECTROLYTE LEAKAGE

#### (1) over discharge leakage test

samples: 9pcs

test conditions: 20±2°C & RH 60±15%, 20Ω continuous discharge 48h

requirement: no visible leakage and overall height no higher 0.2mm than max height (44.5).

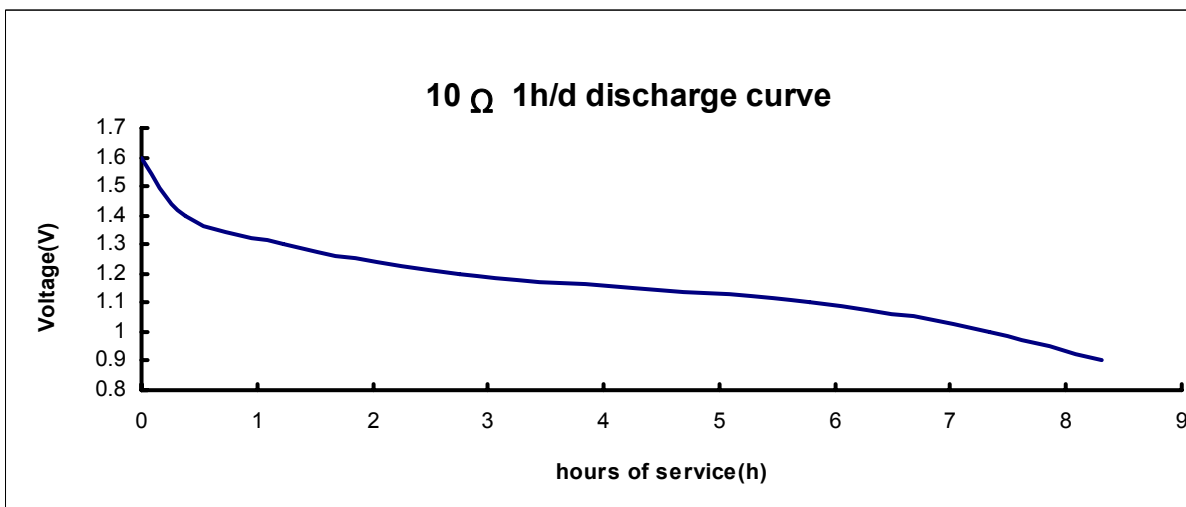
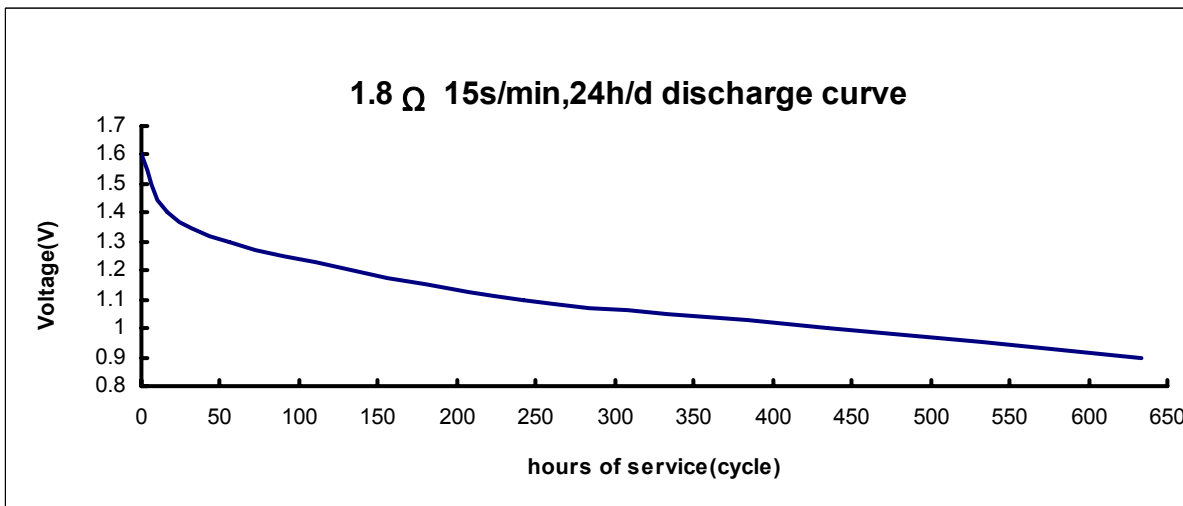
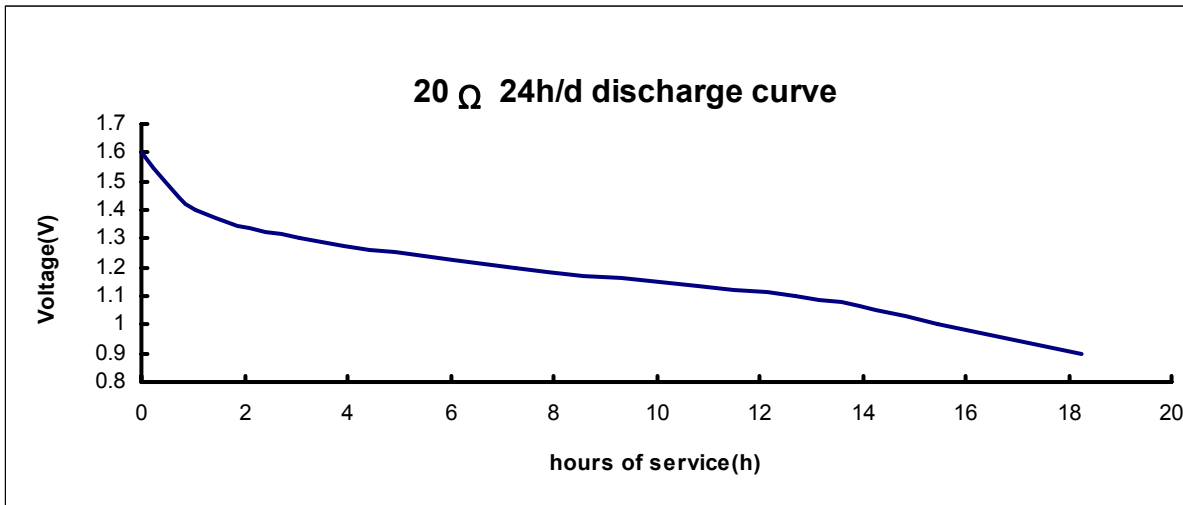
criterion: 0/9

#### (2) high temperature leakage test

samples: 60pcs

test conditions: store 20 days under 60±2°C & RH 90±5%, then store 4~24 h under 20±2°C & RH 60±15%.

requirement: no visible leakage and overall height no higher 0.2mm than max height (44.5).



### 7. SECURITY CHARACTERISTICS

- (1) short-circuit explosion-proof characteristics  
samples: 10pcs  
test conditions: 24h short-circuit under  $20\pm 2^{\circ}\text{C}$ , RH  $60\pm 15\%$ .  
requirement: negative terminal no departure from battery body.  
criterion: 0/10
  
- (2) recharge explosion-proof characteristics  
samples: 10pcs  
test conditions:  $20\pm 2^{\circ}\text{C}$ ,  $60\pm 15\%$ , recharge 24h with 80mA current.  
requirement: negative terminal no departure from battery body  
criterion: 0/10

### PRECAUTION & HANDLING

- (1) Do not disassemble or short-circuit batteries.
- (2) Do not recharge batteries.
- (3) Do not dispose of batteries in fire.
- (4) Do not allow metal objects to contact the battery terminals.
- (5) Do not mix with used or other battery type ( such as alkaline with carbon zinc ).
- (6) Do not solder the batteries directly. If soldering or welding connection to the battery is required, consult our engineer for proper methods.
- (7) Do not over-discharge batteries. Force discharging batteries by external power source in a series may cause explosion.
- (8) To install or remove batteries, follow the appliance manufacturer's instructions.
- (9) Keep battery away from small children. If swallowed, consult a physician at once.
- (10) Remove batteries from device when it is not in use.

### STORAGE

- (1) Store in cool, dry place before use.
- (2) Do not keep batteries at temperature of  $55^{\circ}\text{C}$  or above.
- (3) Do not keep batteries at relative humidity of 85 % or above.