

# **APPROVAL SHEET**

BRAND	akyga
PRODUCT	3.0V LITHIUM-MANGANESE BUTTON CELL
MODEL	CR2477
PREPARED BY	
APPROVED BY	
DATE	MAY. 2021



# Specification Approval sheet

### 1. [SCOPE]

This specification applies to the following 3.0V lithium button cell CR2477

#### 2. [RATINGS]

#### TABLE I:

	ITEM	UNIT	SPECIFICATIONS	CONDITIONS	
Nominal voltage		V	3.0		
Nominal capacity		mAh	1100	Standard discharge with load 4.7kΩ	
	ous short-circuit urrent	mA	≥250	Time≤0.5 second	
Off-lo	ad voltage	V	≥3.20		
Operating	g temperature	$^{\circ}$	-20~60		
Stand	ard weight	g	10.2	Unit cell	
Service	Initial	Standard	1900 h	Continuous discharge with load 4.7kΩ, till 2.0v	
output	After 12 months storage	Standard	1800 h	end-voltage at 20~25°C	

#### TABLE II:

ITEM	CONDITIONS	CHARAC <sup>-</sup>	TERISTICS
Thermal durability	Kept for 20 days at 60 $^\circ\!$	Standard	1800 h
Self-discharge rate	Stored for 12 months at normal temperature and humidity	<u></u>	<u>.</u> 5%

# 3. **[PERFORMANCE AND TEST METHODS]**

Unless otherwise stated, all the testing is carried out under the condition: environmental temperature,  $20^{\circ}$ C ~25°C; environmental humidity, 65 $\pm$ 20%. Please refer to Table III

### 4. **【SUGGESTIONS AND CAUTIONS】**

- 4.1 Install batteries correctly.
- 4.2 Ensure the contact points to be clean and conductive.
- 4.3 Do not mix different types, different brands batteries to serve together.
- 4.4 Do not heat, recharge the batteries.
- 4.5 Do not dispose of the batteries in fire.
- 4.6 Keep away from the small children, if swallowed promptly see doctor.
- 4.7 Pay attention to the producing date.

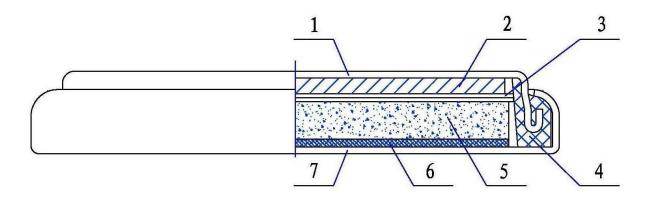


# Specification Approval sheet

#### TABLE III:

No	ITEM	TEST METHODS	STA	ANDARED
110	11 -141	TEST METHODS	017	ANDAILD
1	Dimensions	Using vernier caliper (accuracy ≥ 0.02) while	Diameter	24.5 (-0.20) mm
	Billionolollo	avoiding short-circuit	Height	7.7 (-0.20) mm
2	Off-load voltage	Using multimeter (accuracy $\geqslant$ 0.25%) internal resistance $\geqslant$ 1M $\Omega$		≥3.20 V
3	Instantaneous short-circuit current	Time of short-circuit should be less than 0.5 second and avoid repeated test within half an hour	<i>&gt;</i>	250 mA
4	Appearance	Eyeballing Bright, clean, no r leakage, And no flaw		
5	Capacity	Continuously discharge for 8 hours with load $4.7k\Omega$ , temperature at $20~25~^{\circ}C$ , humidity at $65\pm20\%$ till 2.0v end-voltage (for fresh battery only: within 3 months)	-	≥1900 h
6	Vibration test	Put battery on the platform of the vibrations machine, start the machine and adjust the frequency form 10 times per minute to 15 times per minute. keep it running for an hour	Characteris	stics keep stability
7	Leakage at high temperature test	Stored under temperature (60°C) for 7 days	No lea	kage allowed
8	Over discharge Test	After 2.0v end-voltage, continuously discharged for 5 hours	No lea	kage allowed

# 5. 【CUTAWAY DIAGRAM OF 3.0V LITHIUM MANGANESE DIOXIDE BUTTON CELL】



- 1. Cathode Shell 2. Cathode (slice of lithium) 3. Septum
- 4. Gasket

- 5, Anode (MnO<sub>2</sub>) 6, Anode collector net
- 7. Anode shell



# Specification Approval sheet

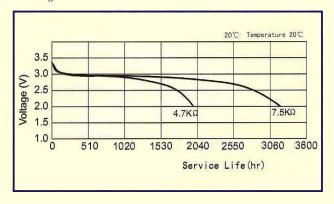
#### SPECIFICATIONS



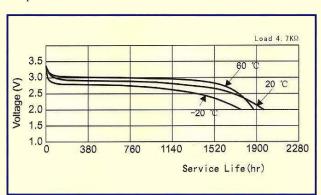
Model No.	CR2477	Dimensions (mm)
Nominal Voltage	3 (V)	
Nominal Capacity	1100 (mAh)	( )
Load Resistance	4.7 (kΩ)	Ø24.5 - 8.3
Weight	10.2 (g)	Ø21 Θ
Using Temperature	-20℃~75℃	<b>⊕</b>

#### STANDARD CHARACTERISTICS

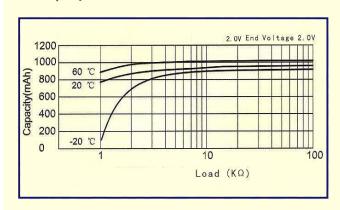
#### Discharge Characteristics



#### Temperature Characteristics



#### Load-capacity



#### Pulse Discharge Characteristics

