Battery Pack Engineering Department

Energy Solutions Business Division

SANYO Electric Co., Ltd.

Test summary of UN test for Lithium ion battery

Customer Model : KNB-65L(M)
Global Code : BJ-A000792AB

Product Name : 2UF464462F-KESP-0

Manufacturer : SANYO Electric Co., Ltd. 222-1 Kaminaizen, Sumoto City, Hyogo 656-8555, Japan

Tel +81-799-23-3931, email prb-bp-ta@ml.jp.panasonic.com https://industrial.panasonic.com/ww/products/batteries/

Test Laboratory : Same as the manufacturer

We declare that this battery passed UN test

				illis battery passed on test.		
Manual of Tests and Criteria (38.3 Lithium batteries)		Test	Note	Number of test batteries/cells		
No.	Test item	results	11010			
T 1	Altitude simulation	Pass				
T 2	Thermal test	Pass			After 50 cycles	
T 3	Vibration	Pass			fully charged	
T 4	Shock	Pass		4 batteries	4 batteries	
T 5	External short circuit	Pass				
Т 6	Crush	Pass		First cycle 50% charged 5 cells		
T 7	Overcharge	Pass		First cycle, fully charged 4 batteries	After 50 cycles, fully charged 4 batteries	
T 8	Forced discharge	Pass		First cycle,fully discharged 10 cells	After 50 cycles, fully discharged 10 cells	

<sup>\*1</sup> The test data may contain additional test result other than above table.

Lithium ion battery Specification

Item	Value/Description	Note
Watt-hour rating / Rated capacity	11 Wh / 1.46 Ah	
Nominal voltage	7.4 V	
Weight	max.89.2 g	
Physical description	Battery with outer case	
Lithium equivalent content	0.88 g	

Above test procedures are compliant to the following manual.

(Manual of Tests and Criteria ST/SG/AC.10/11, PartIII, sub-section 38.3, Rev.5A1 for cell, Rev.5A1 for battery)

Judgment for necessity of test items is carried out based on the latest rules, and it is not linked with the version actually tested.

Dec.05.2019

Certificate of Package Drop Test for Lithium ion battery

Customer Model : KNB-65L(M)

Global Code : BJ-A000792AB

Product Name : 2UF464462F-KESP-0

H.Kuroda Senior Manager Battery Pack Engineering Department Energy Solutions Business Division

SANYO Electric Co., Ltd.

We declare that this battery passed UN test.

Test item	Test results	Note	
Package Drop Test	Pass	The package shall be dropped from 1.2m high on to a concrete surface (flat and horizontal) with five orientations (drop once a sample); (1)flat on the bottom, (2)flat on the long side, (3)flat on the short side, (4)on the edge, (5)on the corner	

## Lithium ion battery Specification

Item	Nominal value	Note
Watt-hour rating / Rated capacity	11 Wh / 1.46 Ah	
Nominal voltage	7.4 V	
Lithium equivalent content	0.88 g	

Above test procedures are compliant to the following regulation. (Model Regulations ST/SG/AC.10/1/Rev.20, Special Provision188)