



**亚测通检测**  
YACETONG TESTING

Report No. ATT2020SZ0901053IP  
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# APPLICATION FOR IP CODE

**On Behalf of**

**Product:** Rugged Case  
**Trade Name:** MAXELL  
**Model Name:** #199516

**Prepared for**

Maxell Corporation Of America  
3Garret Mountain Plaza 3rd Floor Suite #300 Woodland  
Park, NJ07424

**Prepared by**

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<p>TEST REPORT IEC/EN 60529 Degrees of protection provided by enclosures(IP code)</p>	
Tested by (+ signature) .....	Jack yu
Reviewed by (+ signature) .....	Peter peng
Approved by (+ signature) .....	Jim he
<b>Testing Laboratory</b> .....	Shenzhen Yacetong Testing Technology Services Co., Ltd.
Address .....	Room 5009 Baode Industry Center, Baode Industry Center, Lixin South Road, Huaide Community Fuyong Baoan District, Shenzhen, China
Applicant's name .....	Maxell Corporation Of America
Address .....	3Garret Mountain Plaza 3rd Floor Suite #300 Woodland Park, NJ07424
<b>Test specification:</b>	
Standard .....	EN 60529:1991+A1:2000+A2:2013
<b>Test Report Form No.</b> .....	IEC/EN60529-1
<b>Test item description</b> .....	
Brand .....	MAXELL
Manufacturer .....	Boluo County Quancheng Electronic co.,Ltd
Address .....	Fuxing Ind, Futian Town, Boluo City, Huizhou, Guangdong province, China
Model/Type reference .....	ZWN-010,ZWN-010,ZWN-011,ZWN-012,ZWN-013, ZWN-014,ZWN-015,ZWN-016,ZWN-017,ZWN-019
Ratings .....	IPX7
IP degrees .....	N/A
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object .....	N (N/A)
- test object does meet the requirement .....	P (Pass)
- test object does not meet the requirement .....	F (Fail)
<b>Test</b>	
Date of receipt of test item .....	2020-09-05
Date(s) of performance of test .....	Until to 2020-09-11
Date of issue .....	2020-09-14





**General remarks:**

Throughout this report a point is used as the decimal separator.

The test results presented in this report relate only to the object tested.

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**General product information:**

The unit with model #199516 is a Soap dispenser

Model #199516 was used as the main test model, and other tests were carried out on #199516



11	General requirements for tests		P
11.1	Atmospheric conditions for water or dust tests	25.7°C, 50%R.H.	P
11.2	Test samples		P
11.3	Application of test requirements and interpretation of test results		P
11.4	Combination of test conditions for the first characteristic numeral	IPX7	P
11.5	Empty enclosures		N/A

12	Test for protection against access to hazardous parts indicated by the first characteristic numeral		N/A
12.1	Access probes		N/A
12.2	Test conditions		N/A
12.3	Acceptance conditions		N/A
12.3.1	For low-voltage equipment. (Rated voltage not exceeding 1000V a.c. and 1500V d.c.)		N/A
12.3.2	For high-voltage equipment (Rated voltage exceeding 1000V a.c. and 1500V d.c.)		N/A
12.3.3	For equipment with hazardous mechanical parts		N/A

13	Test for protection against solid foreign objects indicated by the first characteristic numeral		N/A
13.1	Test means		N/A
	Test means and the main test conditions are given in table 7		N/A
13.2	Test conditions for first characteristic numerals 1, 2, 3, 4		N/A
13.3	Acceptance conditions for first characteristic numerals 1, 2, 3, 4		N/A
13.4	Dust test for first characteristic numerals 5 and 6		N/A
13.5	Special conditions for first characteristic numeral 5		N/A
13.5.1	Test conditions for first characteristic numeral 5		N/A
13.5.2	Acceptance conditions for first characteristic numeral 5		N/A



13.6	Special conditions for first characteristic numeral 6		N/A
13.6.1	Test conditions for first characteristic numeral 6		N/A
13.6.2	Acceptance conditions for first characteristic numeral 6		N/A

14	Test for protection against water indicated by the second characteristic numeral		P
14.1	The test means and the main test conditions are given in table 8		P
14.2	Test conditions		P
	Test means and main test conditions are given in table 8		P
	During the tests for IPX1 TO IPX6 the water temperature should not differ by more than 5K from the temperature of the specimen under test		N/A
	For IPX7 details of the water temperature are given in 14.2.7	IPX7	P
	Test for second characteristic numeral 8, the test conditions are subject to agreement between manufacturer and user, but they shall be more severe than those prescribed in 14.2.7 and they shall take account of the condition that the enclosure will be continuously immersed in actual use		N/A
14.2.1	Test for second characteristic numeral 1 with the drip box		N/A
14.2.2	Test for second characteristic numeral 2 with the drip box		N/A
14.2.3	Test for second characteristic numeral 3 with oscillating tube or spray nozzle		N/A
14.2.4	Test for second characteristic numeral 4 with oscillating tube or spray nozzle		N/A
14.2.5	Test for second characteristic numeral 5 with the 6.3mm nozzle		N/A
14.2.6	Test for second characteristic numeral 6 with the 12.5mm nozzle		N/A
14.2.7	Test for second characteristic numeral 7: temporary immersion between 0.15m and 1m	IPX7	P



	The test is made by completely immersing the enclosure in water in its service position as specified by the manufacturer so that the following conditions are satisfied		N/A
	a) the lowest point of enclosures with a height less than 850mm is located 1000mm below the surface of the water		N/A
	b) the highest point of enclosures with a height equal to or greater than 850mm is located 150mm below the surface of the water		N/A
	c) the duration of the test is 30min		N/A
	d)the water temperature does not differ from that of the equipment by more 5K		N/A
14.2.8	Test for second characteristic numeral 8: continuous immersion subject to agreement		N/A
14.3	After testing in accordance with the appropriate requirements of 14.2.1 to 14.2.8 the enclosure shall be inspected for ingress of water	No ingress of water. Comply with the second characteristic numeral 7 requirement.	P
	It is the responsibility of the relevant technical committee to specify the amount of water which may be allowed to enter the enclosure and the details of a dielectric strength test	After test, No breakdown.	P
	In general, if any water has entered, it shall not:		----
	be sufficient to interfere with the correct operation of the equipment or impair safety;	No ingress of water	P
	deposit on insulation parts where it could lead to tracking along the creepage distances;	No ingress of water	P
	reach live parts or windings not designed to operate when wet;	No ingress of water	P
	accumulate near the cable end or enter the cable if any.		N/A
	If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.		N/A
	For enclosure without drain-holes, the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts		N/A



15	Test for protection against access to hazardous parts indicated by the additional letter		N/A
15.1	Access probes		N/A
	The access probe are given in table 7		N/A
15.2	Test conditions		N/A
	The access probe is pushed against any openings of the enclosure with the force specified in table 7		N/A
15.3	Acceptance conditions		N/A
	Test for the additional letter B		N/A
	Test for the additional letter C and D		N/A



\*\*\*\*\*END OF REPORT\*\*\*\*\*