

Test report

Test items	IK protection level test
Test object	SP-F620A
Purpose of detection	Verify the IK protection grade of SP-F620A product
Test time	2019-7-5
Testing equipment	Standard Code: GB/T 2423.55-2006 Standard Name: Environmental testing for electrical and electronic products-Part 2: Test methods Test Eh: Environmental testing for electric and electronic products--Part 2: Test methods--Test Eh: hammer tests) (Environmental testing for electric and electronic products--Part 2: Test Methods --Test EH: Hammer tests) IK grade test equipment, 1.7KG metal hammer, tape measure
Test method and procedure: Refer to GB/T 2423.55-2006 (IEC 60068-2-75:1997) Environmental testing for electrical and electronic products - Part 2: Test methods Test Eh: Hammer test and GBT 20138-2006 (IEC62262:2002) electrical equipment shell to the external mechanical collision protection standard content of the test	

Test data:

1. Record the state of the sample before the test.



2. Set up the test device and conduct the test according to IK07 grade requirements (40cm height, 0.5KG hammer 2J energy)



0.5KG metal hammer



height 40cm

3. After the impact, record the appearance data of the sample. Test result: no glass burst and deformation occurred after the hammer



4. Fixed impact hammer test according to IK08 grade requirements (30cm height, 1.7KG weight hammer, 5J energy).



1.7KG 5J metal hammer



height 30CM

测试人：韦相在

审核人：

日期：

5. After the impact, record the appearance data of the sample. Test result: no glass burst and deformation occurred after the hammer



Attached table: IK grade test standard reference table

Table 1 Correspondence of IK codes and their corresponding collision energies

IK code	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
collision Energy /J	a	0.14	0.2	0.35	0.5	0.7	one	2	5	10	20
Note 1: If higher collision energy is required, 50J is recommended											
Note 2: Some national standards use one digit to represent the specified impact energy. To avoid confusion with it, the characteristic digit is represented by two digits.											
a No protection according to this standard.											

表 1 IK 代码及其相应碰撞能量的对应关系

IK 代码	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
碰撞 能量/J	a	0.14	0.2	0.35	0.5	0.7	1	2	5	10	20
注 1：如要求更高的碰撞能量,推荐取值 50J。											
注 2：有些国家标准使用一位数字表示规定的碰撞能量,为避免与之混淆,故特征数字选用两位数字表示。											
a 按本标准为无防护。											

Table 2 Drop height

Energy / J	0.14	0.2		(0.3)	0.35	(0.4)	0.5		0.7	one	2	5	10	20	50
kg Equivalent mass/drop weight, ±1%/mm	0.25	(0.2)	0.25	(0.2)	0.25	(0.2)	(0.2)	0.25	0.25	0.25	0.5	1.7	5	5	10
	56	(100)	80	(150)	140	(200)	(250)	200	280	400	400	300	200	400	500

Note 1: See Note 3.2.2.

Note 2: The unit of energy in this section, Joule (J), is derived from the standard acceleration of gravity (ga). g. The warp value is 10 m/s2

表 2 跌落高度

能量/ J	0.14	0.2		(0.3)	0.35	(0.4)	0.5		0.7	1	2	5	10	20	50
等效质量/ kg	0.25	(0.2)	0.25	(0.2)	0.25	(0.2)	(0.2)	0.25	0.25	0.25	0.5	1.7	5	5	10
跌落高度， ±1 %/mm	56	(100)	80	(150)	140	(200)	(250)	200	280	400	400	300	200	400	500

注 1：见 3.2.2 注。

注 2：本部分的能量单位焦耳(J)由标准重力加速度(g_n)导出。g_n 经圆整取值为 10 m/s²。

Test results:

Through the appeal test data, it was proved that IK08 grade 5J, 1.7KG weight, height 300MM did not appear glass breakage after the test hammer. According to the national standard GB/T 20138-2006 /IEC 62262:2002 Article 4.4 test and GB/T 20138-2006 /IEC 62262:20024.2 Table 1 content and article 6, SP-F620A glass surface **IK grade passed IK08**

Final conclusion of the test:

According to the above test data analysis, the protection grade of SP-F620A IK grade glass surface against external mechanical collision is IK08; The results of this experiment are only responsible for the sample results.