VS10C

TEST DATA IEC61000 SERIES

DWG No.: CA709-58-01					
APPD	APPD	СНК	DWG		
Imunayorm 6/Sep./199	j. wet - 2. SEp. 99	Sopr. 2, 99	d hang 02-50p-99		

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^{*}The above data is typical value data.

The values are considered to be actual capability data.

1. ELECTRO-STATIC DISCHARGE TEST (IEC61000-4-2)

MODEL: VS10C

(1) Equipment used

NSG435 (SCHAFFNER.)

Discharge resistance : 330Ω Capacity : 150pF

(2) Test conditions

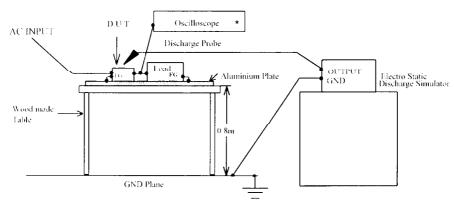
Input voltage : 100VAC · Output voltage : Rated
 Output current : 100% · Polarity : +,-

· Number of tests : 10 times · Discharge interval : >1 Second

(3) Test method and Device test point

Contact discharge: FG,Case screw

Air discharge : Input and Output terminal



(*) Used Oscilloscope or Analog Voltage Meter.

(4) Acceptable conditions

- 1. Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2. Output voltage to be within regulation specification after the test.
- 3. Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

Contact Discharge	Test Result		Air Discharge	Test Result		ılt	
(kV)	VS10C -5	VS10C -12	VS10C -24	(kV)	VS10C -5	VS10C -12	VS10C -24
2	PASS	PASS	PASS	2	PASS	PASS	PASS
4	PASS	PASS	PASS	4	PASS	PASS	PASS
				8	PASS	PASS	PASS

2. ELECTROMAGNETIC RADIATION SUSCEPTIBILITY TEST (IEC61000-4-3)

MODEL : VS10C

(1) Equipment used

TS5010 RADIATION IMMUNITY MEASUREMENT SYSTEM (TOYO CORPORATION)

BILOG ANTENNA (CHASE)

(2) Test conditions

* Input voltage : 100VAC * Output voltage : Rated

Output current: 100% Amplitude Modulated: 80%, 1KHz

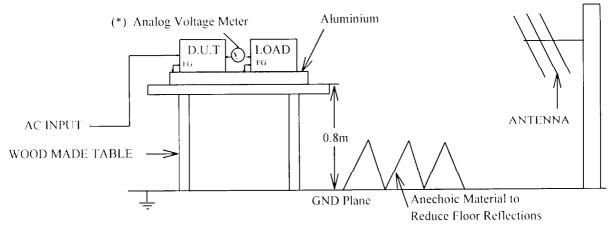
* Electromagnetic Frequency : 80~1000MHZ * Ambient temperature : 25°C

Distance : 2.4m Wave Angle : Horizontal and Vertical

* Sweep Condition : 1.0% Step Up, 2.0 Seconds Hold

* Test Angle : Top/Bottom, Both Sides, Front/Back

(3) Test method



(*) Analog Voltage Meter used because Oscilloscope may malfunction.

(4) Acceptable conditions

- 1. Output voltage regulation not to exceed ±5% of initial (before test) value during test.
- 2. Output voltage to be within regulation specification after the test.
- 3. Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

Radiation Field Strength (V/m)	VS10C-5	VS10C-12	VS10C-24
l	PASS	PASS	PASS
3	PASS	PASS	PASS
10	PASS	PASS	PASS

3. ELECTRICAL FAST TRANSIENT BURST TEST (IEC61000-4-4)

MODEL : VS10C

(1) Equipment used

EFT/B Generator : FNS-100L (NOISEKEN)

(2) Test conditions

* Input voltage : 100VAC * Output voltage : Rated

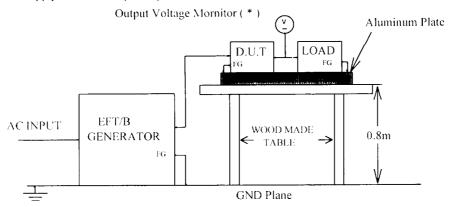
* Output current : 100% * Test time : 1 minute

* Polarity :+, *Ambient temperature : 25°C

* Number of tests : 3 times

(3) Test method and Device test point

Apply to N.L.FG separately, as well as, all at the same time.



(*) Used Oscilloscope or Analog Voltage Meter.

(4) Acceptable conditions

- 1. Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2. Output voltage to be within regulation specification after the test.
- 3. Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

Test Voltage (kV)	Repetition Rate	Test Result		
	(kHz)	VS10C-5	VS10C-12	VS10C-24
0.5	5	PASS	PASS	PASS
1	5	PASS	PASS	PASS
2	5	PASS	PASS	PASS

4. SURGE TEST (IEC61000-4-5)

MODEL : VS10C

(1) Equipment used

Surge Generator : NSG651 (SCHAFFNER)

Coupling impedance : Common 12Ω Coupling capacitance : Common 9uF

Normal 2Ω Normal $18\mu F$

(2) Test conditions

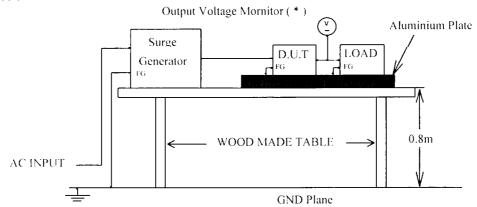
· Input voltage : 100VAC · Output voltage : Rated

Output current: 100% Number of tests: 5 times

Polarity : +/- Mode : Common, Normal

(3) Test method and Device test point

Apply to Common mode (N-FG, L-FG) and Normal mode (N-L).



(*) Used Oscilloscope or Analog Voltage Meter.

(4) Acceptable conditions

- 1. Output voltage regulation not to exceed ±5% of initial (before test) value during test.
- 2. Output voltage to be within regulation specification after the test.
- 3. Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

Test Voltage (kV)	Test Result		
Common	VS10C -5	VS10C -12	VS10C -24
0.5	PASS	PASS	PASS
ı	PASS	PASS	PASS
2	PASS	PASS	PASS

Test Voltage (kV)	Test Result		ılt
Normal	VS10C	l .	VS10C
	-5	-12	-24
0.5	PASS	PASS	PASS
I	PASS	PASS	PASS

5. CONDUCTED SUSCEPTIBILITY TEST (IEC61000-4-6)

MODEL : VS10C

(1) Equipment used

RF POWER AMPLIFIER : A01580-50-R (R&K)

SIGNAL GENERATOR : SMG (ROHDE & SCHWARZ)

COUPLING DE-COUPLING NETWORK (CDN): KSI-8003 (KYORITSU)

(2) Test conditions

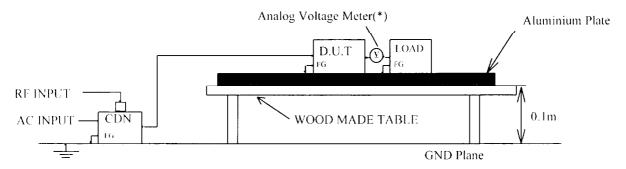
* Input voltage : 100VAC * Output voltage : Rated

* Output current : 100% * Electromagnetic Frequency : 150KHz~80MHz

* Sweep Condition : 1.0% Step Up, 2.0 Seconds Hold

* Ambient temperature : 25°C

(3) Test method



(*) Used Oscilloscope or Analog Voltage Meter.

(4) Acceptable conditions

- 1. Output voltage regulation not to exceed $\pm 5\%$ of initial (before test) value during test.
- 2. Output voltage to be within regulation specification after the test.
- 3. Along with 1 and 2, no discharge of fire or smoke, as well as no output failure.

Voltage Level (V)	VS10C-5	VS10C-12	VS10C-24
1	PASS	PASS	PASS
3	PASS	PASS	PASS
10	PASS	PASS	PASS