

# VS10C

## TEST DATA IEC61000 SERIES

DWG No. : CA709-58-01			
APPD	APPD	CHK	DWG
<i>Imunayama</i> 6/Sep./'99	<i>K. Ito</i> 2-SEP-99	<i>Eng</i> Sept. 2, '99	<i>d. Han?</i> 02-sep-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

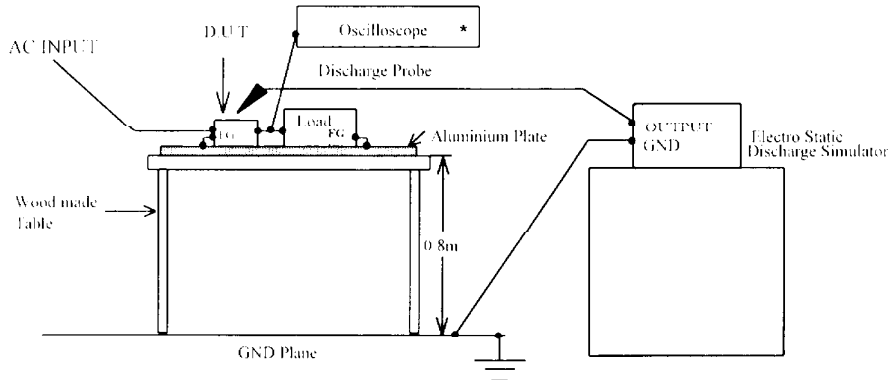
**(2) Test conditions**

- 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 ±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.

**(5) Test Result**

Contact Discharge (kV)	Test Result			Air Discharge ( kV )	Test Result		
	VS10C -5	VS10C -12	VS10C -24		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**

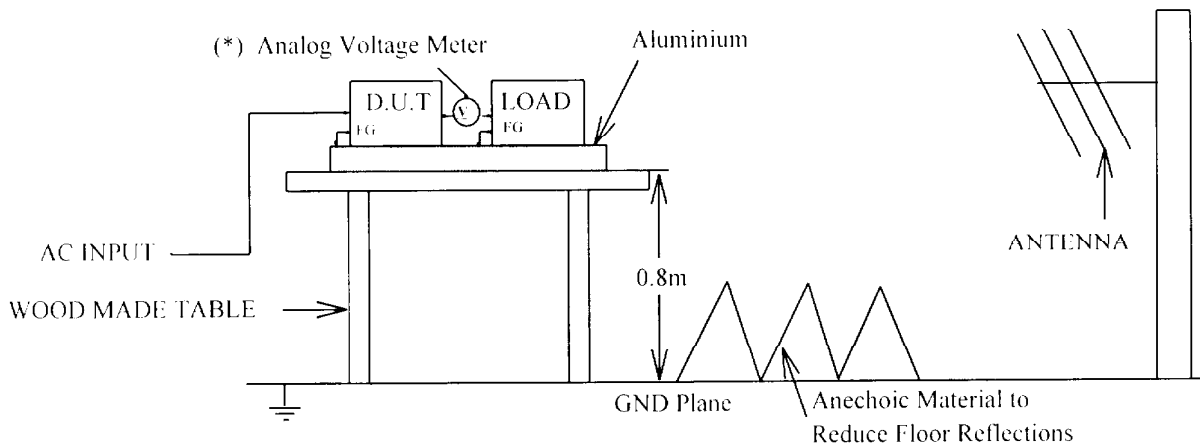
**(1) Equipment used**

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  $\pm 5\%$  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.

**(5) Test Result**

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





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

**MODEL : VS10C**

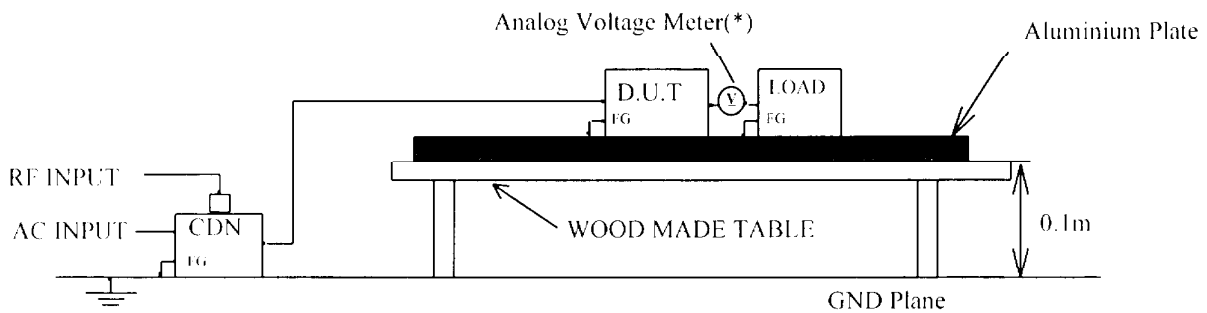
**(1) Equipment used**

- RF POWER AMPLIFIER : A01580-50-R (R&K)
- SIGNAL GENERATOR : SMG (ROHDE & SCHWARZ)
- COUPLING DE-COUPPING 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.

**(5) Test Result**

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