

# VS30C

## TEST DATA IEC61000 SERIES

DWG No. : CA711-58-01			
APPD	APPD	CHK	DWG
<i>Murayama</i> 6/Sep./99	<i>Kizuta</i> 2-SEP-99	<i>Shige</i> Sept. 2, '99	<i>Shige</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 : VS30C**

**(1) Equipment used**

NSG435 (SCHAFFNER.)

Discharge resistance : 330Ω                      Capacity : 150pF

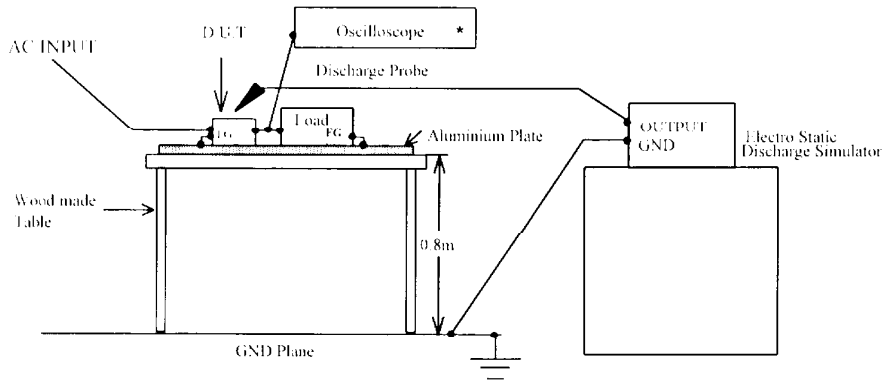
**(2) Test conditions**

- 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		
	VS30C -5	VS30C -12	VS30C -24		VS30C -5	VS30C -12	VS30C -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 : VS30C**

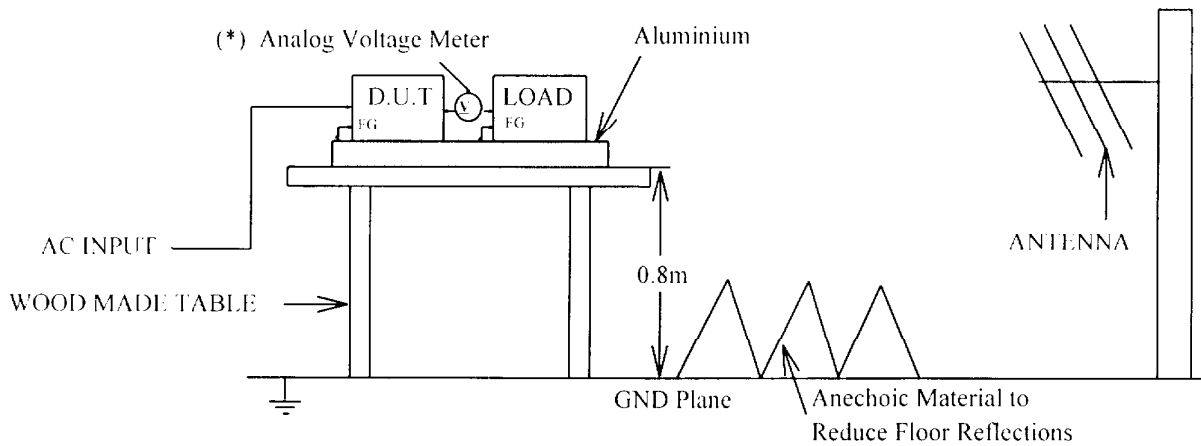
**(1) Equipment used**

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)	VS30C-5	VS30C-12	VS30C-24
1	PASS	PASS	PASS
3	PASS	PASS	PASS
10	PASS	PASS	PASS

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

**MODEL : VS30C**

**(1) Equipment used**

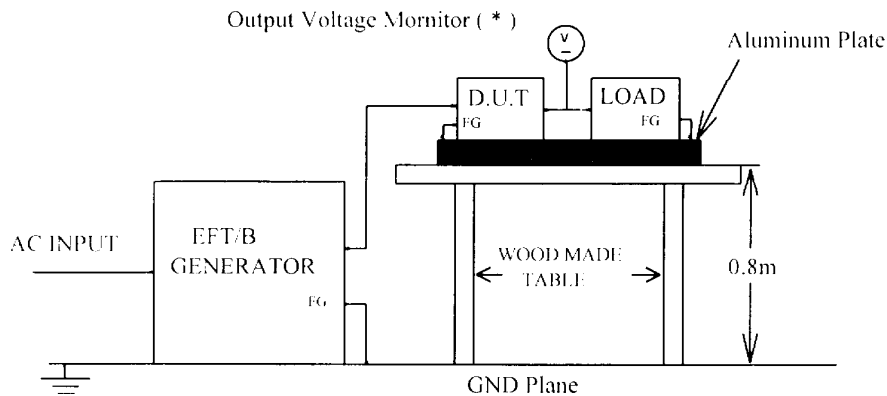
EFT/B Generator : FNS-100L ( NOISEKEN )

**(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.

**(5) Test Result**

Test Voltage (kV)	Repetition Rate (kHz)	Test Result		
		VS30C-5	VS30C-12	VS30C-24
0.5	5	PASS	PASS	PASS
1	5	PASS	PASS	PASS
2	5	PASS	PASS	PASS



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

**MODEL : VS30C**

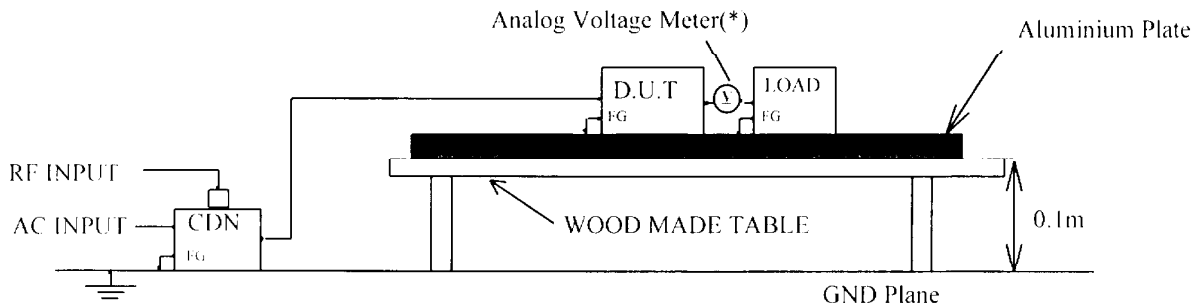
**(1) Equipment used**

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 )	VS30C-5	VS30C-12	VS30C-24
1	PASS	PASS	PASS
3	PASS	PASS	PASS
10	PASS	PASS	PASS