NoiseKen NOISE LABORATORY CO., LTD.

High Frequency Surge Test (Burst Waveform)

SWCS-931SD

A damped oscillatory wave simulator simulates the fast-repeating, high-frequency noise that occurs when switches turn on and off, and evaluates the resistance of electronic and electrical equipment.
Higher reliability and accuracy have been realized comparing to the previous model with adaption of the semiconductor switch.

- **A maximum output voltage of 1.5 kV**
- **Repetition frequency variable from 0.4 Hz to 400 Hz**
- **Output resistance variable from 50 to 200 Ω (10Ω step)**

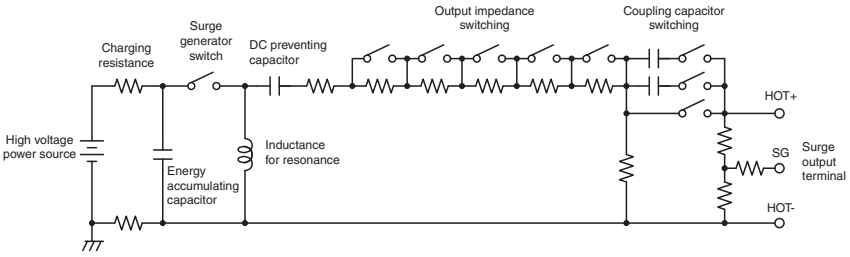
Specification

Parameter	Specification
Output waveform	Damped oscillatory wave
Output voltage	100 V ～ 1500 V
Polarity	Positive (1st wave) or negative (short bar switching)
Oscillatory frequency	1.5 MHz ± 0.2 MHz
Time to half-value peak	10μs ± 20 % (0.1 kV ～ 1.0 kV) 10μs ± 40 % (1.0 kV ～ 1.5 kV)
Output impedance	50 ～ 200 Ω (10 Ω pitch set possible)
Repetition cycle	0.4 ～ 400 Hz (3-stage switching, continuously variable)
Injection time	1s ～ 10min. or continuous
Coupling capacitor	100 pF / 470 pF
EUT power capacity	–
Power supply	AC 100 ～ 240 V 50 / 60Hz
Dimensions	(W) 430 x (H)200 x (D)400 mm
Weight	Approx. 7 kg

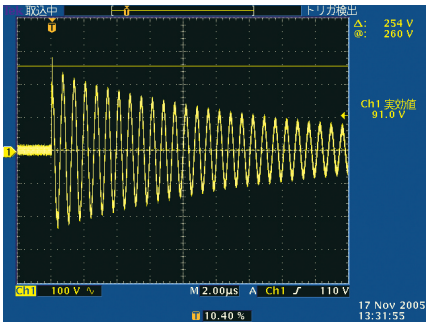
Accessories

Item	Q'ty
Accessories bag	1 pc.
Instruction manual	1 volume
Power cable	1 pc.
Short bar	1 pc.

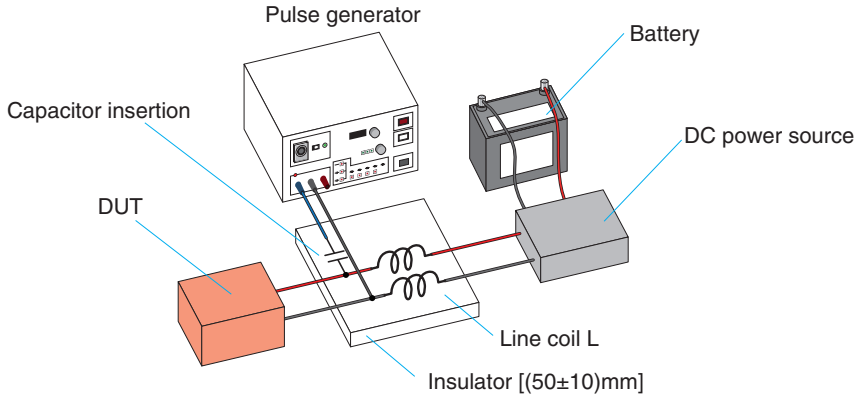
Internal Circuit



Output Waveform



Test Setup



Test procedure example using the damped oscillatory wave simulator

① Place the main simulator unit (hereinafter referred to as the Main unit) onto the outside of the ground reference plane.
② Connect the included power supply cable to AC IN on the backside of the Main unit.
③ Connect the DUT connection cables to HOT and GND terminals of the Main unit (insert a capacitor to HOT side), and connect the other side of the cables are to the testing harnesses. * The connection cables to be prepared by the user.
④ Set the injection voltage and other parameters of the controller part of the Main unit's front panel and start the test.