MODEL 6550-1 POWER SWEEP GENERATOR

100 watt source for conducted audio frequency susceptibility testing

APPLICATION

The Model 6550-1 Power Sweep Generator is an unusually versatile instrument which produces triangular, square and sine waves at 100 watt levels with selectable sweep rates or manual control. This generator is especially suited for rapidly making conducted susceptibility tests on power line inputs to test samples as required by MIL-STD-461A/462 and other EMI specifications.

DESCRIPTION

A switch allows selection of triangular, square wave and sine wave shapes. The frequency range switch provides ten-to-one ranges from 15 Hz to 150 KHz in four steps. The calibrated tuning dial covers the range for manual tuning. In addition, an automatic sweep selector switch provides two rates of sweep. An output level control adjusts the output to any desired level up to 100 watts. Protective circuits prevent damage due to line transients or overload.

FEATURES

- Solid state.
- Up to 100 watts output.
- Protective circuit at output.
- Wide frequency range, 15Hz to 150 KHz.
- Manual or automatic frequency sweep.
- Three basic wave shapes: triangular, square, sine.
- Low output impedance.

AVAILABLE ACCESSORIES

Type 6220-1A Audio Isolation Transformer. Use for injecting output of 6550-1 in series with power to test sample as required by test method CS01.

Type 7021-1 Phase Shift Network. Use for removing the power frequency from the scope and voltmeter in CS01 tests.

Type 7032-1 Isolation Transformer. Use for removing power ground from the case of scope or voltmeter.

Type 7033-1 Impedance Matching Transformer. Plugs into output terminals to step up the normal 2.4 ohms to 50 ohms impedance. Use when a 50 ohm signal source is needed.

Type 7035-1 Wide Range Transformer. Plugs into output terminals to provide up to 115 volts r.m.s. at 80 watts. Use as a power source for frequencies from 20 Hz to 10 KHz.

SPECIFICATIONS

Frequency Range: 15 Hz to 150 KHz.

Wave Shapes: Triangular wave, square wave and sine wave.

Output Power: 100 watts sine waves at 1000 Hz into 2.4 ohms (non-inductive).

Output Impedance: Approximately 2 ohms.

Output Voltage: 16 volts r.m.s. at 1KHz into 2.4 ohms (non-inductive).

Level Control: Panel mounted output level control.

Sweep Rates: 1 per minute, 10 per per minute, or manual dial.

Terminals: Binding posts with .75” spacing for 3-way connection.

Power Requirements: 115 volts 60 Hz, 4.0 amperes. (230 volts 50 Hz, 2.0 amperes available.)

Size: 8.12” wide, 9” high, 14.62” deep. (20.64 cm x 22.86 cm x 37.15 cm.)
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AUDIO SUSCEPTIBILITY TEST SETUP FOR D.C. LINES

* USE 7032-2 FOR 230 VOLT POWER LINE

AUDIO SUSCEPTIBILITY TEST SETUP FOR A.C. LINES

* USE 7032-2 FOR 230 VOLT POWER LINE