

ANDY HISH ASSOCIATES
5401 BURNET AVENUE
VAN NUYS, CALIF 91411

ESD-255 ELECTROSTATIC
DISCHARGE GENERATOR

SPECIFICATIONS

INPUT 115 volt AC, 50 to 60 Hz single phase,
three conductor grounding line cord.

OUTPUT Continuously adjustable from zero to
25 KV DC.

VOLTMETER Wide View, 3 1/2", 90 degree extended range.
Two ranges: 0 - 5,000; 0 - 25,000 volts.
Output voltage accuracy: $\pm 5\%$.

PROBES Two probes are available using distributed
line techniques to replicate the wave forms
of static discharge from personnel with a
metal intervening object such as a key, ring
(Probe P255-1) deck chairs or push cart
(Probe P255-2). The networks of these probes
replicate these complex networks.

SIZE 8 1/2" deep X 16 1/2" wide X 11" high.

WEIGHT 15 lbs.

Phone: (818) 997-1332 or (818) 989-1417

The logo for Andy Hish Associates, featuring the letters 'ah' in a stylized, bold font, with 'ANDY HISH ASSOCIATES' written in smaller text below it.

INTRODUCTION

1.0 GENERAL

The Andy Hish Electrostatic Test Generator, Model ESD-255, provides a comprehensive simulation of the broad spectrum of electrostatic discharge events that occur under actual-use conditions.

Comparative data taken between actual ESD events and those produced by the ESD-255 illustrate that: (A) the spectral distribution of the dynamic impulses is virtually identical; (B) the correlation of waveform-to-amplitude is virtually identical; and, (C) the time interval between impulses in the multiple-pulse ESD event series is comparable. (See Appendix A) .

1.1 SPECIFICATIONS

INPUT	115 volt AC, 50 to 60 Hz single phase, three conductor grounding line cord.
OUTPUT LEVEL	Continuously adjustable from zero to 25 KV DC.
IMPULSE WAVEFORM CHARACTERISTICS	See Appendix A (Bulletin 057255-1)
PROBES	Two probes are currently available using distributed line techniques to replicate the wave forms of static discharge from personnel with a metal intervening object such as a key, or ring, (Probe 255-1) desk chair or push cart (Probe 255-2). It should be noted that the ESD circuit is significantly more complex than a simple R-C network description. The networks of these probes replicate these more complex networks. (Other probes on custom order basis are described herein)
SIZE	8 1/2" Deep X 16 1/2" Wide X 11" High.
WEIGHT	15 LBS.

Initialization Level: 2000 Volts

P255-1 Probe

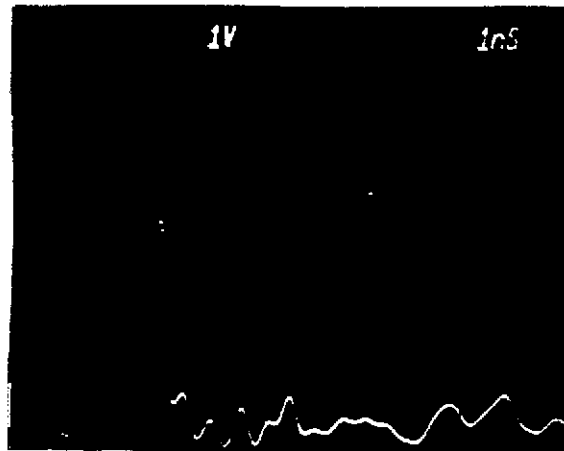


Figure 2 A

Vert: 10 Amps/Div
Time: 1 nSec/Div
Displayed:
Ip: 41 Amps
Tr: 500 pSec
Width: 50%-50%
450 pSec

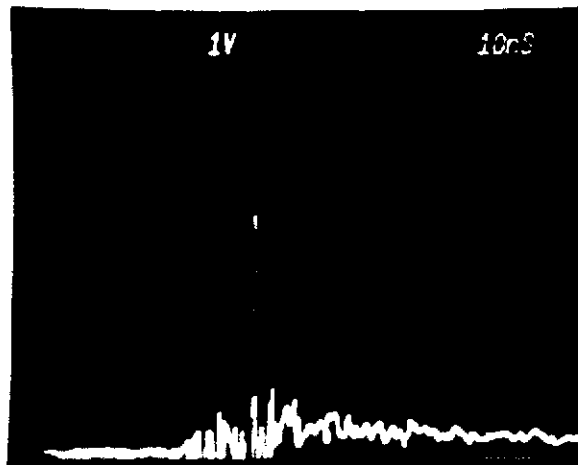


Figure 2 B

Vert: 10 amps/Div
Time: 10ns/Div
Displayed:
Ip: 42 Amps

Figure 2A and 2B

Initialization Level 10KV

P255-2

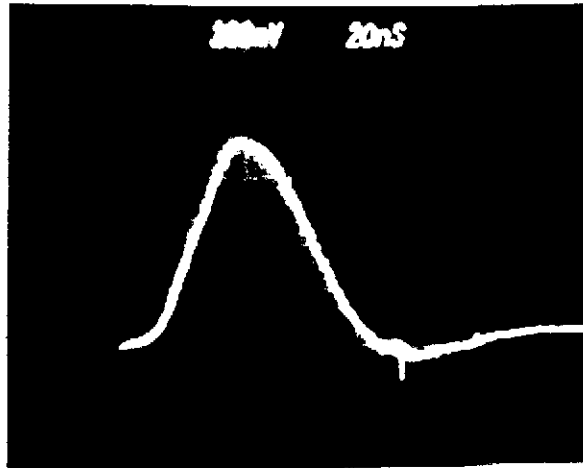


Figure 4

Vert: 10 amps/Div
Time: 20nSec/Div
Displayed:
Ip: 36 Amps
Tr: 10nSec

Figure 4