



Electrostatic Discharge Simulator

EDS 10IC

Human Body Model (HBM) :

- ANSI/ESDA/JEDEC JS-001
- ANSI/ESD STM5.1
- JESD22-A114F
- MIL-STD-883G
- GJB 548B

Machine Model (MM):

- ANSI/ESD STM5.2
- JESD22-A115C

Features

- > Minimum output voltage 5 V, 1 V step
- > Intelligent Touchscreen Operation
- > Support single-shot or automatic discharge testing; test counter and frequency are configurable

Introduction

The EDS 10IC Electrostatic Discharge Simulator complies with standards including ANSI/ESDA/JEDEC JS-001, ANSI/ESD STM5.1/2, JESD22-A114F/-A115C, MIL-STD-883G, etc.

Specially developed in accordance with the characteristics and requirements of electrostatic discharge immunity tests for Human Body Model (HBM) and Machine Model (MM), it is capable of conducting ESD immunity testing on semiconductor components such as LEDs, transistors and ICs.

Application Areas



Technical Parameters

HBM Short-circuit Current Parameters	
Discharge Capacitor	100 pF
Discharge Resistor	1,500 Ω
Pulse Amplitude	5 V ~ 8,000 V
Peak Current (I_{ps})	0.17 A $\pm$ 10% @250 V 0.33 A $\pm$ 10% @500 V 0.67 A $\pm$ 10% @1,000 V 1.33 A $\pm$ 10% @2,000 V 2.67 A $\pm$ 10% @4,000 V 5.33 A $\pm$ 10% @8,000 V
Rise Time	2 ns ~ 10 ns
Pulse Width	150 ns $\pm$ 20 ns
Ringing Amplitude	<15% Peak Current
HBM 500 Ω Resistor & Current Parameters	
Peak Current (I_{pr})	375 mA ~ 550 mA @1,000 V 1.5 A ~ 2.2 A @4,000 V
I_{pr}/I_{ps}	$\geq$ 63%
Rise Time	5 ns ~ 25 ns
MM Short-circuit Current Parameters	
Discharge Capacitor	200 pF
Discharge Resistor	0 Ω
Pulse Amplitude	5 V ~ 1,000 V (2,000 V can be customized)
Peak Current (I_{p1})	0.44 A $\pm$ 20% @25 V 0.88 A $\pm$ 20% @50 V 1.75 A $\pm$ 10% @100 V 3.5 A $\pm$ 10% @200 V 7.0 A $\pm$ 10% @400 V
I_{p2}/I_{p1}	67% ~ 90%
Circle	66 ns ~ 90 ns
MM 500 Ω Resistor & Current Parameters	
Peak Current (I_{pr})	0.85 A ~ 1.2 A @400 V
Current (I_{100}) @100 ns	0.23 A ~ 0.40 A @400 V
I_{200}/I_{100}	30% ~ 55%

General Parameters

Polarity	+, -, alternative
Frequency	0.1 Hz ~ 5 Hz
Trigger Count	1 ~ 999
Trigger Mode	Automatic, Manual, External Trigger
Working Power	AC 100 V ~ 240 V, $\pm 10\%$, 50/60 Hz
Weight	Approx. 10 kg
Dimension	450 (L)*190 (W)*320 (H) mm
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Optional Accesories

1	Test Line	Model: EDS 10IC-line1/line2 For test connection	
2	Test support	Model: IC-DIP40 For placing IC	
Power Cable, Grounding Wire, User Manual			

Optional Accesories

1	Test Support	Model: CD-GDT90 Used for EUTs with TO56 encapsulation	
---	--------------	--	---

SUZHOU 3CTEST ELECTRONIC CO., LTD.

Address: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

E-mail: globalsales@3ctest.cn

Service: service@3ctest.cn

Tel: +86 - 512 - 68077192

Web: www.3ctest.com



3CTEST is always striving for product innovation and quality improvement. Product appearance and technical specifications are subject to change without further notice.