ESD Detector

Model EV-10A Stand alone or PC network connection

ESD examples to be detected

- ① Discharge from a component to metal tool
- 3 Discharge between components

Static charging examples to be detected

- ① Charging by motion of charged objects
- 3 Charging by the potential change

PC Display, Main menu



ESD Detector EV-10A



To monitor or evaluate ESD

Assembling GMR head
Production of LCD panel
ESD control of IC wafer

- 2 Discharge from human body
- (4) Discharge from chair, case or unit
- 2 Friction charging



Chair discharge

500ps/sec



To alarm electrostatic charging

•GaAs assembling	•Detect EMI tro	uble •	Evaluate ESD control
 Trouble shoot of ed 	quipments •To	avoid ESD [.]	trouble
•To monitor the ES	SD environment	•To monit	tor component stock room

TOKYO ELECTRONICS TRADING CO..LTD.

4-8-26, Nishiki-cho, Tachikawa-shi Tokyo, 190-0022 Japan Tel: +81-42-548-8011 Fax: +81-42-548-8013 Web-site:www.tet.co.jp

PC Display, Recorded data

Features and Functions

ESD Detector Model EV-10A,

- Monitor ESD, Evaluation of ESD control
- Evaluation of static charging in the area
- Digital measurement
- ESD voltage may be predicted
- Manual or remote control

- Control level is set for charge/discharge
- Event count given
- ESD strength at the monitored location
- Monitor temp. and humidity
- Daily, weekly, monthly report

General description

The Model EV-10A is to detect and monitor Electro-Static Discharge (ESD) as well as Field Induced charging. It can be located any place so that strength and frequency of the ESD and static charging around there can be recorded. Sensitivity and bandwidth is improved, and polarity and peak value of ESD can be captured. By the detection of Dynamic-Charge Induction, you can detect the field induced charging level that may cause ESD. If multiple EV-10A is connected to a Host PC, PC monitor will show the location of ESD events. One PC accepts up to 20 units so that wide area can be monitored. This system receives and records electro-magnetic wave and field induced charging, then outputs location graph or sequence graph. In general, the ESD robustness of the electronics devices is rapidly decreasing because of increasing density. This requests more precise control of the static charge in the field such as manufacturing line and assembling line. Because MR head and GaAs IC are some of the most ESD sensitive devices, they should be handled in the field where static charge is very carefully controlled. The Model-10A is very useful to monitor the field for these components.

Specifications

ESD Detector

Sensitivity: ± 0.3 mV to ± 35 mVpeak Numeric display: 0mV to $\pm 2,500$ mV Polarity detection: Yes Temp/RH: $\pm 2^{\circ}$ C, ± 5 %RH (Optional) Antenna: Monopole, 50Ω , 2GHz BW Induced Charging detector(Optional) Sensitivity: ± 0.55 mV to $\pm 12..5$ mVpeak Numeric display: 0mV to $\pm 2,500$ mV Polarity/count: Yes Sensor size: Approx. 80mm sphere, 200mm height Others Standard Specification Display: Received ESD voltage, Temp. and RH LEDs: Range of received signal is shown. Buzzer: Alarm AC adaptor: 100VAC+/-10%, 8VA Size, Weight: Approx. 178W, 127D, 73H, 1kg PC, Scanner Scanner EVSC-04: 4 channels Scanner EVSC-20: 20 channels PC, Printer: Includes data collection software RS-232C Cable: 10 meter/unit Options With induced charge detector: Model EV-10A-F With induced charge detector: Model EV-10A-F With Temp/RH sensor : Model EV-10A-ET With both above : Model EV-10A-FET

Specifications subject to change without notice.

Contact to: