NAPSON CORPORATION

The Pioneer
for Sheet resistance/Resistivity
measurement

Model : RT-70V series

4 point probe sheet resistance/resistivity measurement system



Combinational measurement system by RT-70V & Stage.

Easy measurement handling & setting

Features

- Combinational measurement system by Measurement tester(RT-70V) & Stage.
- Thickness input with easy JOG dial operation (RT-70V Tester)
- Tester self-test function/Auto change-over measurement range function
- Thickness & Temperature correction function for Silicon sample
- Complies with the following ASTM & JIS

  <JIS> : JIS H 0602-1995
  JIS K 7194-1994

  <ASTM> : ASTM F 84-99 (SEMI MF84)
  ASTM F 374-00a
  ASTM F 390-11
  ASTM F 1529-97

Applications

- Semiconductor materilas, Solar-cell materials (Silicon, Polysilicon, SiC etc)
- New materials, functional materials (Carbon nanotube, DLC, graphene, Ag nanowire etc)
- Conductive thin film (Metal, ITO etc)
- Diffused sample (or layer)
- Silicon-related epitaxial materials, Ion-implantation sample
- Others (*Please contact us for details)

Sample Sizes

*Depends on each measurement stage type.
Please refer back side of this leaflet for details.

Measurement Range

Test Item	Measurement Range
V/I Ratio	1.0m ~ 3.0M ohm
Sheet resistance	5.0m ~ 10.0M ohm/sq
Resistivity(Slice:0.01~9999.99µm)	1.0µ ~ 300.0k ohm.cm

A global leading company for resistivity measurement system.





Measurement Stage line-up

*Customized stages are also available. Please contact us for details.



RT-70V / RG-7C

(Tester + Auto[motor]probe up-down stroke stage)

Size ; ~ 300mm(12 inch)

Thickness ; ~ 10mm

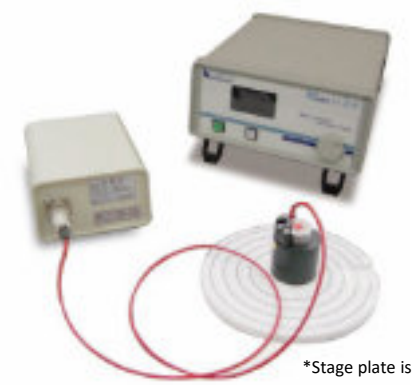


RT-70V / RG-5

(Tester + Manual[lever]probe up-down stroke stage)

Size ; ~ 200mm(8 inch)

Thickness ; ~ 10mm



*Stage plate is an option.

RT-70V / TS-7D

(Tester + Hand-held 4-point probe measurement unit)

Size ; 20mm ~



RT-70V / RG-7S

(Tester + Manual X-Y & Auto Z axis stage)

Size ; ~ 500 x 500mm

Thickness ; ~ 10mm

Measurement Accuracy / Repeatability

Measurement Accuracy	Measurement Repeatability
%BIAS < ±1.81%	**CV ≦ 0.7%**
$\%BIAS = \frac{\overline{X} - NIST\,guaranteed\,value}{NIST\,guaranteed\,value} \times 100[\%]$	$CV = \frac{\sigma}{\overline{X}} \times 100[\%]$
$\overline{X}$ ----- Average of same point x 10times measurement(23℃)	σ ----- Standard deviation of same point x 10times measurement(23℃) $\overline{X}$ ----- Average of same point x 10times measurement(23℃)

* Measurement accuracy & repeatability as above are guaranteed values for Tester:RT-70V.

☆**Please visit our website for the movie of this system.**

*Please contact us for more details.

*The customers are always welcome to do Demo measurement.

*Specification subject to change without notice.

Toho TECHNOLOGY

Toho Technology, Inc.
4809 N Ravenswood Ave #113, Chicago, IL 60640, USA
TEL: +1-773-583-7183
info@tohotechnology.com www.tohotechnology.com