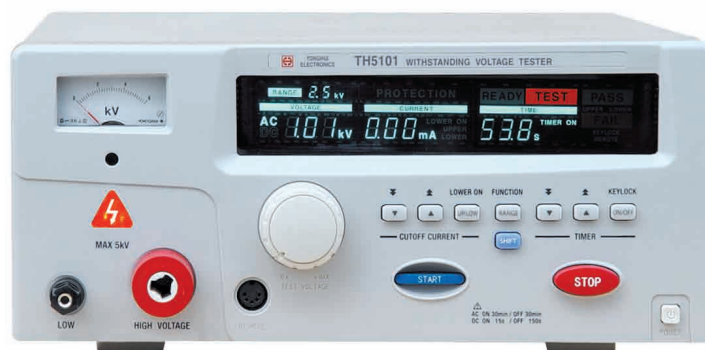


Safety Tester/Hipot Tester

E. TH5100 AC/DC Withstanding Voltage Tester

Features

- TH5101/TH5101B AC/DC Withstanding Voltage Tester
TH5101A/TH5101C AC Withstanding Voltage Tester
TH5101D/TH5101E AC/IR Withstanding Voltage Tester
- Clear and nice display on high-brightness VFD
- 0-5kV AC/DC voltage output, up to 100mA AC current, and 100 mA DC current
- Measurement voltage of insulation resistance is 100V/500V/1000V, and the upper limit of insulation resistance measurement is up to 10GΩ
- Automatic range-switch of insulation measurement
- Single high voltage output terminal, switch of output terminal is needless in switching AC/IR, and the automatic switch of W-I, I-W can be performed
- Short-circuit test function at grounding terminal
- Analog or digit indicates voltage
- Comparison of upper and lower limit window, PASS/FAIL judgment outputs
Single high voltage output terminal, switch of output terminal is needless in switching AC/DC
- Time test function from 0.5s to 999s
- Over zero startup and cutoff to prevent component under test being damaged
- Four special test modes to improve security
- DC auto discharge function (TH5101/TH5101B)
- Excellent noise retraining circuit to improve reliability of operation
- REMOTE, signal input/output interface, RS-232C, make the operation convenient for user and improve the safety of measurement.
- Memory backup function



TH5101

Brief Introduction

As a newly-developed hipot test series of our company, TH5101/TH5101A/TH5101B/TH5101C/TH5101D/TH5101E hipot tester is used to perform hipot test for electronic device and component to make safety evaluation. The product provides highest security, stability and maneuverability. High voltage indicator will indicate to warn you of the danger of possible electric shock if there is electricity at high-voltage output port. And it is quick and convenient for you to read voltage data through double analog meter indication. The instrument provides REMOTE interface and input/output interface, by which the instrument can be controlled remotely, thus the safety of operation is improved. RS-232C interface provides convenient condition for communication with computer.

Safety Tester/Hipot Tester

E. TH5100 AC/DC Withstanding Voltage Tester

Specifications

Model		TH5101	TH5101A	TH5101D	TH5101B	TH5101C	TH5101E
Voltage output							
AC	voltage range	0—2.5kV/0-5kV					
	Max. output current	100mA(rated power voltage)			40mA(rated power voltage)		
	Max. output power	500VA			200VA		
	Voltage adjustable rate	≤15% max. rated load changes to idle					
	Voltage waveform	power voltage waveform					
	HV ON/OFF	zero startup switch control					
DC	Voltage range	0—2.5kV/0-5kV	-----	-----	0—2.5kV/0-5kV	-----	-----
	Max. output current	10mA	-----	-----	10mA	-----	-----
	Max. output power	50VA	-----	-----	50VA	-----	-----
	Voltage adjustable rate	≤3% max. rated load changes to idle	-----	-----	≤3% max. rated load changes to idle	-----	-----
	(5kV) Ripple	50Vp-p idle 100Vp-p 10mA resistance load	-----	-----	50Vp-p idle 100Vp-p 10mA resistance load	-----	-----
IR	Voltage range	-----	-----	DC 100V/500V/1.0kV	-----	-----	DC 100V/500V/1.0kV
	Max. output power/current	-----	-----	1W (1.0kV,1.0mA)	-----	-----	1W (1.0kV,1.0mA)
	Voltage adjustable rate	-----	-----	≤1% (0-1mA load)	-----	-----	≤1%(0-1mA load)
	Voltage waveform/ripple	-----	-----	< 20mVp-p (idle) < 100mVp-p (max. load)	-----	-----	< 20mVp-p (idle) < 100mVp-p(max. load)
Voltmeter							
Analo-gy	scale	AC/DC	AC	AC/IR	AC/DC	AC	AC/IR
	accuracy	6kV RMS F.S. ±5% F.S.					
Digit	full scale	2.5kV/5kV F.S.		IR 1.0kV F.S.	2.5kV/5kV F.S.		IR 1.0kV F.S.
	accuracy	±1.5% F.S.		IR ≤1% F.S.	±1.5% F.S.		IR ≤1% F.S.
	Reponse time	200ms, RMS display					

Safety Tester/Hipot Tester

E. TH5100 AC/DC Withstanding Voltage Tester

Current meter/Ohmmeter						
Digit current meter	Accuracy	upper cutoff current $\pm(5\%+20\mu\text{A})$				
Digit resistance meter	Accuracy	-----	$\leq 2\%(< 100 \text{ M}\Omega)$ $\leq 5\%(\geq 100\text{M}\Omega)$	-----	$\leq 2\%(< 100 \text{ M}\Omega)$ $\leq 5\%(\geq 100 \text{ M}\Omega)$	
Reponse time	200ms,RMS display					
Timer						
Setting Range	timerON: 0.5s-999s, min. resolution0.1s					
Accuracy	$\pm 20\text{ms}$					
Comparator						
AC current limit range	0.1-110mA			0.1-45mA		
DC current limit range	0.1-11mA	-----	-----	0.1-11mA	-----	-----
IR resistance test range	-----	-----	100V: 200 k Ω -1.0 G Ω 500V: 1 M Ω -5.0 G Ω 1.0kV: 2 M Ω -10 G Ω	-----	-----	100V: 200 k Ω -1.0 G Ω 500V: 1 M Ω -5.0 G Ω 1.0kV: 2 M Ω -10 G Ω
Min. resolution of current limit	0.1mA					
Min. resolution of resistance limit	-----	0.01M Ω		-----	0.01M Ω	
storage and interface						
parameter storage	Set the auto saving of parameter(at least after a measurement),these will be automatic recovery on the next startup					
REMOTE control(front panel)	START、STOP、START--ENABLE、HV ON indication					
Signal input/output interface	status output: PASS、U-FAIL、L-FAIL、PROTECTION、READY、TEST、HV-ON control: START、STOP、ENABLE、INTERLOCK special test mode setting: double effect, pass hold, momentary test, un-pass hold					
Communication interface	RS232C					

General Specifications

Operation Temperature And Humidity	0°C - 40°C , $\leq 90\%$ RH	
Power Requirements	198 V - 242 V AC , 47.5 Hz - 52.5 Hz	
Power Consumption	TH5101 /A TH5101B/ C	No-load 50VA, AC full-load $\leq 600\text{VA}$ No-load 50VA, AC full-load $\leq 250\text{VA}$
Dimensions (W x H x D)	320mm(W) x 132mm(H) x 300mm(D)	
Weight	TH5101	14Kg Approx.
	TH5101A	13Kg Approx.
	TH5101B	11Kg Approx.
	TH5101C	10Kg Approx.

Ordering Information

TH5101 AC/DC Withstanding Voltage Tester(500W)
 TH5101A AC Withstanding Voltage Tester(500W)
 TH5101B AC/DC Withstanding Voltage Tester(200W)
 TH5101C AC Withstanding Voltage Tester(200W)
 TH5101D AC/IR Withstanding Voltage Tester (500W)
 TH5101E AC/IR Withstanding Voltage Tester (200W)

Instrument Accessories

TH90001R	withstanding voltage test fixture	1
TH90001B	withstanding voltage grounding clip	1
TH90002	withstanding voltage test lead	1
TH5100-IL	cable plug	1

Options

TH90003	remote control withstanding voltage test lead
TH90005	remote controlling box
TH5100-SOFT	RS232C communication control software