



Vehicle Power Supply Circuit Positive Surge Simulator

TIS 60T3

- Toyota TSC0502G
- Toyota TSC3500G
- Toyota TSC3590G
- Toyota TSC7001G
- Toyota TSC7203G
- Toyota TSC7306G

Features

- > 5.7-inch color touch screen front panel operation;
- > Satisfy the test requirement of positive surge test specified in Toyota TSC0502G;
- > Built-in DC switch for spark test;
- > Ethernet and RJ45 interface for PC remote control and test report printing.

Introduction

The vehicle power supply circuit positive surge simulator TIS 60T3 is designed according to Toyota TSC0502G, which can be used to evaluate the resistance of the devices to the positive surge voltage that is produced when the battery terminals become disconnected.

It is capable of generating high-frequency pulse (Fig. 15), giant pulse (Fig. 17) and positive pole surge (Fig.19) specified in TSC0502G, featuring easy and intuitive setting design.

Application Areas



Vehicles

Technical Parameters

Test 1: Technical Parameters for High-frequency Pulse Voltage Waveform	
Output Voltage (V_{IP})	73 V \pm 2 V (connected to 25 Ω \pm 0.5 Ω load) 80 V \pm 2 V (connected to 1 k Ω \pm 0.02 k Ω load)
Rise Time (t_r)	\leq 10 μ s
Time Constant (τ)	52 μ s \pm 5 μ s
Pulse Repetition (t)	5 ms
Test Time	10 min
Test 2: Technical Parameters for Giant Pulse Voltage Waveform	
Output Voltage (V_{GP})	100 V \pm 2 V (connected to 25 Ω \pm 0.5 Ω load) 110 V \pm 2 V (connected to 1 k Ω \pm 0.02 k Ω load)
Rise Time t_r	\leq 1 ms
Time Constant (τ)	0.188 s \pm 0.004 s
Pulse Repetition	1 min
Counter	1-99
Test 3: Technical Parameters for High-frequency Pulse + Surge Voltage	
High-frequency Pulse	
Pulse Voltage Peak Value (V_{IP})	73 V \pm 2 V (connected to 25 Ω \pm 0.5 Ω load) 80 V \pm 2 V (connected to 1 k Ω \pm 0.02 k Ω load)
Rise Time (t_r)	\leq 10 μ s
Time Constant (τ)	52 μ s \pm 5 μ s
Pulse Repetition (t)	5 ms
Surge Voltage	
Output Voltage Peak	30 V (+0,-1V)
Pulse Duration	300 ms
Pulse Repetition	1 min
Counter	10 s
Calibration Resistor	25 Ω \pm 0.5 Ω , 1 k Ω \pm 0.02 k Ω
DUT Load(optional)	30 A, 50 A, 75 A, 100 A

General Parameters

Working Power Supply	AC 110V/220V \pm 10% , 50/60Hz \pm 5% (AC 220V 50Hz in mainland China by default)
Dimension	6 U
Weight	About 50Kg
Temperature	5°C-23°C
Humidity	25% - 70%
Air Pressure	86kPa – 106kPa

Standard Accessories

Test Line, Power Cord, Fuse (spare parts), Instruction Manual, Calibration Load R25 Ω , Calibration Load R1000 Ω

Options Accessories

Autolab control software

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