IWATSU

Curve Tracer CS-5000 Series
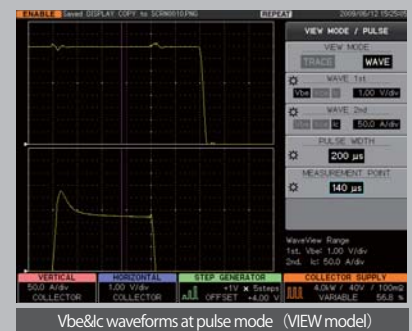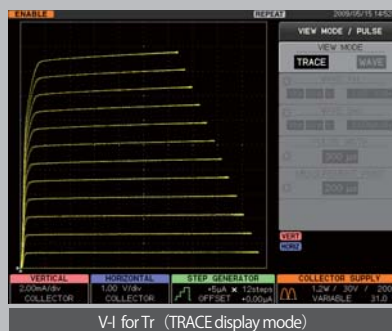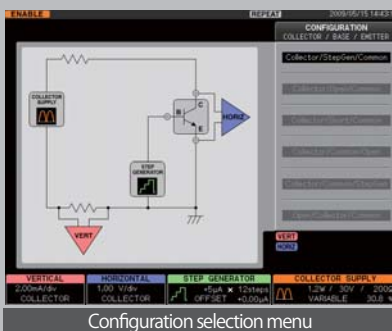
Suitable for various semiconductor specification measurement such as IGBTs, MOSFETs, transistors and diodes, etc.

- ■ Maximum peak voltage at 5000 V
- ■ Maximum peak current at 1000 A (High-current mode including CS-5200 and CS-5300)
    - CS-5200 (Maximum at 400A)
    - CS-5300 (Maximum at 1000A)
- ■ Equipped all models with LEAKAGE mode (Cursor resolution 1pA）
- ■ USB port for display hardcopy, waveform data (CSV format) and measurement setup SAVE/RECALL
- ■ LAN interface for Remote Control

Curve Tracer **CS-5100 / CS-5200 / CS-5300**

Easy to use display layout for all models

| Configuration selection menu | V-I for Tr （TRACE display mode） | Vbe&Ic waveforms at pulse mode （VIEW model） |

Specifications		CS-5100	CS-5200	CS-5300
Collector supply				
Corrector supply Mode	High voltage	High voltage mode: AC, +/- RECTIFIED SIN, +/- DC, +/- LEAKAGE		
	High current	—	High current mode: Pulse	
Maximum peak power consumption selection		120mW、1.2W、12W、120W、390W note)390W can be selected excluding max. peak voltage at 5,000V range		
		—	High current mode(400W,4kW)	High current mode(400W,4kW,10kW)
High voltage mode		Maximum peak current(Maximum peak pulse current)	Maximum peak voltage	
		25mA (25mA)	5,000V (2,500V at AC)	
		750mA (1.5A)	300V	
		7.5A (15A)	30V	
Looping compensation		Stray capacitance compensation between Collector and GND by hardware at high voltage mode. Software compensation is also available.		
High current mode (only for pulse)		—	Max. peak current / Max. peak voltage: 400A / 40V; 40A / 40V	Max. peak current / Max. peak voltage: 1,000A / 40V; 400A / 40V; 40A / 40V
Pulse width / measurement points		—	Pulse width is variable from 50μs to 400μs at 10μs resolution, Measurement point can be set.	
Maximum data points		20 to 1000 points can be set per each traces.		
Step generator				
Current mode		Amplitude range: 50nA to 200mA at 1-2-5 step Maximum current: 10times of STEP AMPLITUDE setting, Offset: +/- 10times of STEP AMPLITUDE setting		
Voltage mode		Amplitude range: 50mV to 2V at 1-2-5 step Maximum voltage: 10times of STEP AMPLITUDE setting, Offset: +/- 10times of STEP AMPLITUDE setting		
Step rate		Staircase waveform: 2times of 50Hz or 60Hz (50Hz or 60Hz at AC mode)	Staircase waveform: 2times of 50Hz or 60Hz (50Hz or 60Hz at AC mode) Pulse: variable from 80ms to 1000ms (Lowest frequency limited by maximum peak power consumption setting)	
Pulse steps		Pules width variable from 50μs to 400μs at 10μs resolution, measurement point can be set.		
Number of steps		0 to 20steps		
AUX output				
Range		OFF, variable from -40V to +40V at 100mV step		
Vertical axis				
Collector current		High voltage mode: 1μA/div to 2A/div (20steps) at 1-2-5 step		
		—	High current mode: 100mA/div to 50A/div (9steps) at 1-2-5 step	High current mode: 100mA/div to 100A/div (10steps) at 1-2-5 step
Emitter current (at LEAKAGE)		1nA/div to 2mA/div (20steps) at 1-2-5 step		
Horizontal axis				
Collector voltage		High voltage mode: 50mV/div to 500V/div, (13steps) at 1-2-5 step		
		—	High current mode: 50mV/div to 5V/div (7steps) at 1-2-5 step	
Base / Emitter voltage		50mV/div to 5V/div (7steps) at 1-2-5 step		
General specifications				
Display		8.4 inch color TFT-LCD（SVGA 800x600pixels)		
Date save / Recall		Internal memory: 256 setups and 4 REF waveforms		
		External: USB port for setups, waveform save&recall, hardcopy of display into removable memory		
USB port		1port (USB1.1)		
Remote control		Remote control with LAN: 1port (100BASE-TX)		
AC power supply/ Power consumption		AC90V-AC264V single phase, 45Hz to 66Hz, 500VA		
Accessories		CS-302*1(Fixture M), CS-500*1(blank adaptor), Operation manual*1, Wire set*1, Power cable*1		
Dimensions, weight and environment condition				
Dimensions（mm)		Approx. 424W×555.2L×221H(mm)	Approx. 424W×555.2L×354.5H(mm)	
Weight		Approx. 30kg without accessories	Approx. 45kg without accessories	
Enviromental conditions		Operation: 0deg. to +40deg	Accuracy guaranteed: +10deg. to +35deg.	

Note) The above specifications are subject to change without notice.