

# PSS BarT-HP

Narrow pulse BAR tester ▶▶▶



## Product Introduction

PSS high-power BAR automatic tester supports high current, ns-level narrow pulse condition testing, fully automatic test BAR LIV curve, spectrum, and far-field parameters. Fully automatic loading and unloading, support loading of various specifications of material boxes, support unloading of various specifications of material boxes or blue film. Support variable temperature test, customers can set the temperature freely. Open measurement database to users for subsequent screening procedures.

## Product application

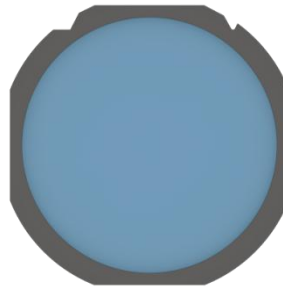
- The equipment is used in Lidar application laser chip, industrial high power laser device, medical and display and other high power laser chip fields

## Product features

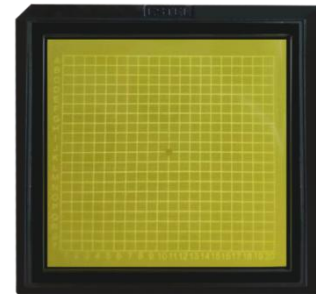
- Support a variety of mainstream specification boxes, fully automatic loading and unloading, avoid scrapping the bar chip caused by material transfer or manual operation



Box

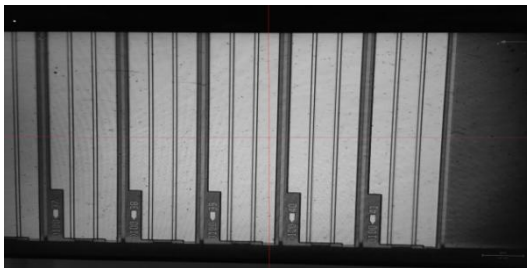


Blue film

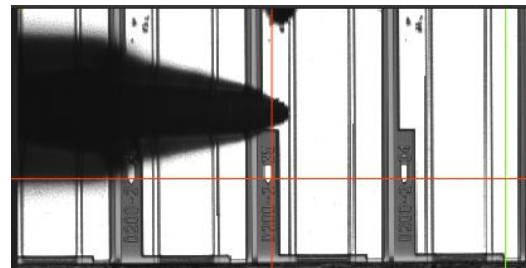


2 inch vacuum release box

- Support automatic loading BAR chip, identify and position the first chip, support ID identification, automatic test, automatic identify BAR chip test closure, automatic unloading

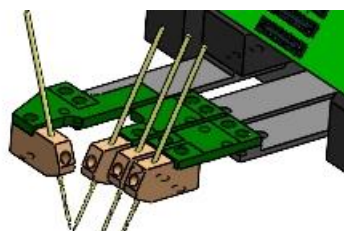


Loading camera focusing (automatic adjust BAR)

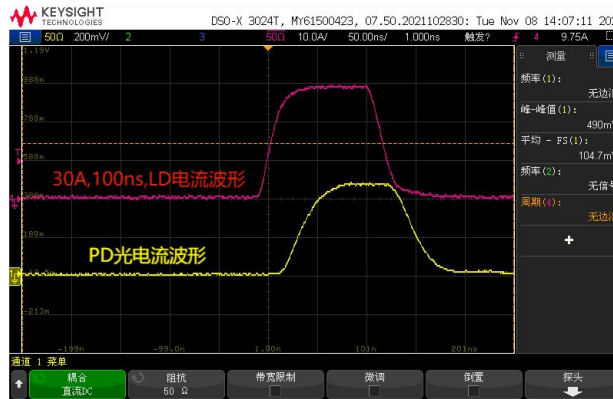


Test camera focusing

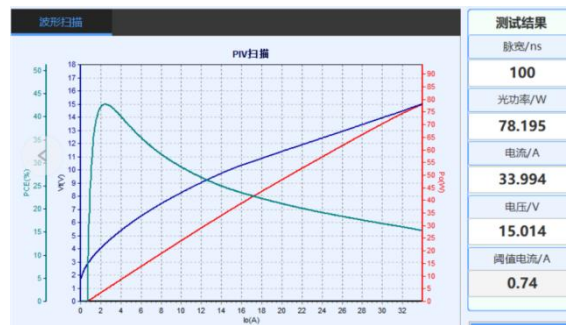
- Adjustable contact pressure of suction nozzle, probe and BAR
- 4-probe structure developed, support four-wire voltage test, low inductance design of current charging loop, support ns-level narrow pulse output, 2 pin P pole, 2 pin N pole; The probe structure supports controllable adjustment of probe press down pressure, support pressure detection



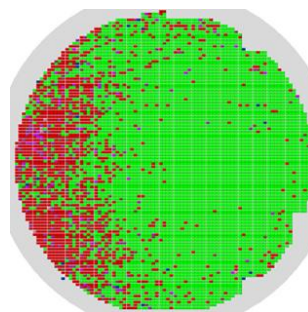
- Integrated self-developed high current 30A, narrow pulse 100ns test instrument, support BAR LIV, spectrum, far field test



- Typical LIV test curve



- Support MAP diagram drawing, convenient for users to analyze the performance distribution of wafer



- Support NG Chip dot marking, support simple chip visual inspection
- Support normal temperature and high temperature test
- Multi-dimensional adjustable measurement structure, satisfy the needs of users for different specifications of bar measurement

## Technical parameters

Parameters	Description/Value
Suitable bar size	length: 15~30mm width: 1~3mm, Other BAR widths tester can be customized
Pulse current output	range 0~30A, accuracy 0.5%rdg±200mA
Pulse characteristic	Min pulse width :100ns, Max duty cycle: 0.1%
Pulse voltage measurement	range 0~40V, accuracy 0.5%rdg±200mV Four-wire test, Peak detection
Pulse current measurement	range 0~30A, accuracy 0.5%rdg±200mA, Peak detection
Optical power measurement	Equivalent photo current detection range and accuracy: range 0~5mA, 0.5%rdg±25uA, Peak detection The basic configuration supports 100W input optical power,different power ranges configure different attenuator , support customized.
Far-field divergence angle test	Range ±45°
Test efficiency (typical)	Single chip single temperature test time: LIV+spectrum (1 current point)+ID identification+mechanical movement total time <9s (excluding loading and unloading movement time)
Wavelength range	default : PD:800-1700 nm, short wavelength can select 400-1100 PD
High temperature control range	Room temperature +15 ~ 85°C, accuracy<±1°C
Room temperature control range	25~50°C, accuracy ±1°C
Equipment size	Including signal light and display: 1250mm×1070mm×1900mm(L×W×H)
Air supply requirements	Positive pressure: > 0.4MPa Negative pressure: If so, < -80KPa