

Wuhan Precise Electronics Co.,Ltd All right reserved 2011-2031

PSS CHIP12806-P

Visible Laser CHIP tester 🕨 🕨

Product Introduction

This equipment is used for visible laser CHIP normal temperature PIV test, spectrum test and classification screening of different test results. Chips use blue film loading, automatic material seeking, Identify and locate, chips are stripped by the blue film thimble, sucked by the suction nozzle, manipulator completed the transport, visual identify and calibrate the position, automatically power on, collect luminescent parameters, test PIV/spectrum, analyze and screening, chips are classified and transported to different blue film positions by manipulator.

Carrie

This equipment has the characteristics of high speed and high precision, and achieves the process of complex timing and strict logic. The equipment adopts linear motor, high-precision module movement, cam and other mechanisms, cooperates with multi-axis movement, visual positioning, ORC identification and other technologies, and has mass production capacity.

Product application

• The equipment is used for automatic test and classification of visible laser bare chips, it achieves the spectrum and LIV parameter testing of edge-emitting chips under normal temperature and high temperature conditions

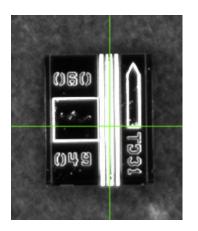


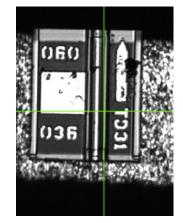
Product features

• Support Chip LIV, spectrum related parameter test, draw test curve

🛃 ChipTest	-	
登录 参数设置 系统校准 设备管理 帮		
上料定位 下料定位	測试曲线 测试信息	
步进mm 相对角度	(ohm) (A/W)(mW) 高温L-I-V曲线 (^V) (mW) 高温光谱	(dbm)
	50 -1.00 -10	0.0
	40.060 0	-10.0
左 右	35 0.40 7	
	30 920 G	
	25-0.00 5	-40.0
	20(0.20) 4 1.3 20.0	-50.0
总行数: 6 🕴 🗆 总颗数: 1 🛟	1(0.40) 3 1.1	-60.0
行间距: 3.70 🛟 校准所有行	1(0.60) 2 0.7 10.0 0.5	-70.0
	(0.80) 1 (1.00) 0 (1.00) 0	
当前行: 3 ; Go 单行校准	(1.08) 0 10 20 30 40 50 60 70 80 90 100 (mA) 1,266 1,268 1,270 1,272 1,274 1,276 1,278 1,280 1,282	-80.0 1,28(mn)
	(ohm) (AW)(mW) 常温L-I-V曲线 (V) (mW) 常温光谱	(dbm)
测试面板	50 4.00 50 3.3 50.0 3.1	0.0
	50 - 400 - 50	0.0 +10.0
测试面板	50 - 100 - 50 - 51 - 50 - 50	0.0
	50 - 100 - 50 31 - 500 31 - 500 32 - 450 45 - 88 - 45 35 - 44 - 95 36 - 44 - 95 36 - 44 - 95 36 - 44 - 95 36 - 44 - 95 37 - 400 38 - 42 - 30 39 - 42 - 30 39 - 42 - 30 39 - 42 - 30 30 - 42 - 42 - 30 30 - 42 - 42 - 42 - 42 - 42 - 42 - 42 - 4	0.0 +10.0
	50 - 100 - 50 - 50 - 50 - 51 - 50 - 51 - 50 - 51 - 51	0.0 -10.0 -20.0
	56 - 100- 50	0.0 -10.0 -20.0 -30.0
	10 -100-50 -30-500 45 080-45- -21 10 -20 -21 10 -22 -25 10 -22 -25 10 -22 -25 10 -22 -25 10 -22 -25 10 -22 -25 10 -22 -25 10 -22 -25 11 -25 -25 10 -25 -25 10 -25 -25 11 -15 -20 11 -16 -17 10 -15 -16 10 -17 -17	0.0 -10.0 -20.0 -30.0 -40.0
	10 -000-50 -000 45 -000-50 -000 30 -500 -000 30 -000 -000 100 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000	0.0 -10.0 -20.0 -30.0 -40.0 -50.0
	Sci - Mode - So	0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -70.0
 に前 の の の	10 -000-50 -000 45 -000-50 -000 30 -500 -000 30 -000 -000 100 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000 -000	0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -70.0 -80.0
	5 - 100-50 4 - 600-45 4 - 60	0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -70.0 -70.0 -70.0 -70.0
 に前 の の の	10 -100-50 45 -000-50 -000-50 -000-50	0.0 -10.0 -20.0 -30.0 -40.0 -50.0 -50.0 -70.0 -80.0

• Chips use blue film automatic loading, and automatic identify chip ID through vision system. The test bench supports automatic secondary positioning of the chip under the camera, and precisely controls the power-on test of the probe





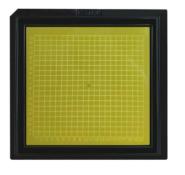
Loading camera focusing

Test bench camera focusing

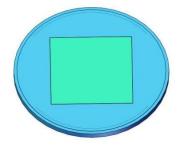
• The probe is automatic pressing down to power-on, probe's press down intensity is adjustable, support real-time display of the probe intensity



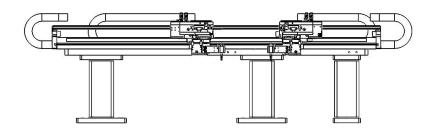
• Unloading configuration includes 8 blue film disks and 4 2-inch GelPak boxes



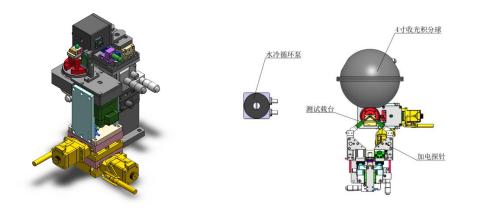
2 "vacuum release box



- 6 "blue film ring
- Picking and handling mechanism (composed of loading and unloading suction nozzle, the handling axis is controlled by high-precision linear motor), with good stability and high motion precision



Achieve low-power test and high-power test: low-power test system (air cooling + TEC temperature control; 1-inch integrating sphere to collect light, measure PIV, spectrum), (reserved) high-power test system (water cooling + TEC temperature control; 3-inch integrating sphere to collect light, measure PIV, spectrum)





Technical parameters

Parameters	Description/Value
Suitable chip size	L x W : 200-2000 μm x 120-300 μm
	Other sizes can choose customized test platforms
Instrument model	(Keithley) 2601B-PULSE
Measurement parameter	LIV curve, Ith, Po, Vf, Im, Rs, SE, Kink Etc.
LD driving current	The low-power chip range 0~300mA, accuracy 0.1%FS±0.5mA
	The high-power chip range 0~5A ,accuracy 0.1%FS±5mA
Current mode	CW/Pulse
P-I-V	Pulse 0.1ms (ON) Duty1%
Forward voltage test	The low-power chip range 0 ~15.0V, accuracy 0.1% FS \pm 50mV
	The high-power chip range 0 \sim 10.0V , accuracy 0.1% FS±50mV
Reverse current test	0 ~ 100nA, accuracy 1% FS±1.0nA, @<50%RH
	0 ~ 1uA, accuracy 0.1% FS±10nA, @<50%RH
	0 ~ 10uA, accuracy 0.1% FS±0.1uA, @<50%RH
	0 ~ 100uA, accuracy 0.1% FS±1uA, @<50%RH
	0 ~ 1mA, accuracy 0.1% FS±10uA, @<50%RH
Reverse voltage test	range 0 ~ 30.0V, accuracy 0.1% FS \pm 0.3V
Optical power test	The low-power chip ranges : 0-300mW; accuracy 0.1% FS±50uW; wavelength range
	380-700nm
	The high-power chip ranges : 0-10W; accuracy 0.1% FS±10mW; wavelength range
	380-700nm
Temperature control	range:20~85℃; stability≤ ±0.5℃
Equipment size	2050mm×1800mm×2090mm(L×W×H)
Air supply requirements	Positive pressure: >0.6MPa Negative pressure: <-80KPa
Power supply	AC 220V/8A 50Hz