

# MODEL 58212-C

## KEY FEATURES

- High-speed and high-precision testing
- Supports lateral, vertical and flip-chip configurations
- Up to 8 inch wafers
- Wide range of electrical tests (LD or LED)
- Accurate and fast alignment scanning process
- Multi-site test functionality
- Auto load/unload

## Measurement Items

- Electrical measurements:
  - Threshold Current (Ith)
  - Forward Voltage (Vf)
  - Reverse Leakage Current (Ir)
  - Reverse Breakdown Voltage (Vbr)
- Optical measurements:
  - Optical Power
  - Centre Wavelength (Wc)
  - Peak Wavelength (Wp)
  - Full Width at Half Maximum (FWHM)

## Hardware

- Automated LED wafer/chip prober
- Electrical test module
- Optical test module
- Optional ESD test module (LED applications)



# PHOTONICS DEVICE MAPPING PROBE TESTER MODEL 58212-C

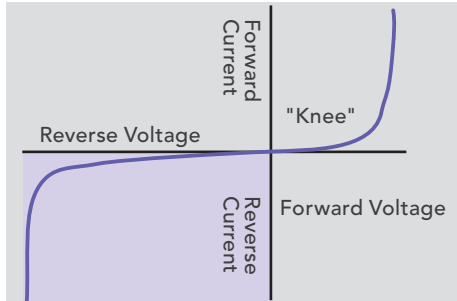
Chroma 58212-C is an automated Epitaxial Wafer/Chip probe test system with precision temperature-control that provides fast and accurate optoelectronic performance measurements and multi-site tests for a wide range of Laser Diode and Light-Emitting Diode (LED) product applications.

The 58212-C probe tester features a flexible design that provides testing for different types of optoelectronic components, including Lateral, Vertical, and Flip Chip. The pre-test scan program provides complete wafer mapping to ensure test accuracy, while our patented probe tip prevents scratching of the DUT and ensures that every chip contact is made properly.

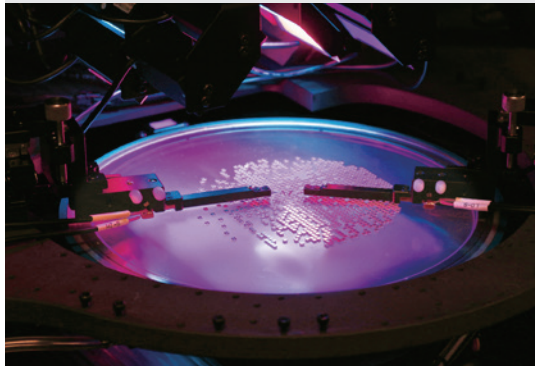
Chroma 58212-C's customized multi-site design supports testing multiple locations in a single probe, stabilizes the test, saves test time and increases test performance.

At the same time, optical data such as forward current, forward voltage, leakage current, reverse breakdown voltage, slope efficiency, and photoelectric conversion efficiency can be obtained all in one single probe.

The 58212-C's software interface and advanced logic algorithms significantly improve production efficiency. Comprehensive test reports and yield statistics allow users to easily get a handle on production.



I-V Curve



## SPECIFICATIONS

Model	58212-C	
Application		
Test Area	ψ 8 inch wafer	
Wafer Size	Chip on wafer: 2", 4", 6", 8" Chip on tape : 2", 4", 6"	
Chuck Type (A chuck is decided by a device type)	Lateral type, Vertical type, and Flip chip type (select one of them)	
Die Size	6 ~ 120mil	
Pad Size	≥ 50μm	
Operating Temperature	25°C ~85°C / 0°C ~100°C	
<b>Electrical Measurements</b>		
Measurement Items	Threshold Current (Ith), Forward Voltage (Vf), Reverse leakage Current (Ir), Reverse Breakdown Voltage (Vrb)	
Current Range	± 6A (≤ 5V & Pulse Mode Only), ± 3.5A (≤ 5V), ± 2.5A (≤ 10V), ± 1A, ± 100mA, ± 10mA, ± 1mA, ± 100μA, ± 10μA, ± 1μA	
Driving Mode	CW and Pulsing	
Pulse Width	Min.100μs (depending on the DUT, pulse width may need to be longer to have stable voltage and power readings)	
Duty Cycle	< 10% (when I=2.5A~3.5A, pulse width ≤ 5ms, voltage<5V) (Heat dissipation affects the pulse duty cycle constraint)	
<b>Optical Measurements</b>		
Measurement Items	Optical Power, Centre Wavelength (Wc), Peak Wavelength (Wp), Full Width at Half Maximum (FWHM)	
Optical Power	Range	0.5mW~500mW
	Repeatability	≤ 3%
Wavelength	Range	UVC to NIR (Further discussion is possible on other ranges)
	Repeatability (FWHM)	≤ ± 0.3nm
<b>Facility Requirements</b>		
Machine Dimension	1160mm (L) x 1240mm (W) x 1500mm (H)	
Power Requirement	Single phase, 220VAC ± 10%, 50/60Hz, 20A	
Input Air	-0.2 Mpa / ψ 6 mm	
Weight	750 kg	
Environment	Temperature	20°C ~ 30°C
	Humidity	40% ~ 70%

\* All specifications are subject to change without notice.

## ORDERING INFORMATION

58212-C: Photonics Device Mapping Probe Tester

Get more product & global distributor information in Chroma ATE APP



iOS



Android

Search Keyword

58212-C

HEADQUARTERS  
CHROMA ATE INC.  
88 Wenmao Rd.,  
Guishan Dist.,  
Taoyuan City  
333001, Taiwan  
T +886-3-327-9999  
F +886-3-327-8898  
www.chromaate.com  
info@chromaate.com

U.S.A.  
CHROMA ATE, INC.  
(U.S.A.)  
7 Chrysler, Irvine,  
CA 92618  
T +1-949-421-0355  
F +1-949-421-0353  
Toll Free  
+1-800-478-2026  
www.chroma.us.com  
info@chroma.us.com

EUROPE  
CHROMA ATE EUROPE B.V.  
Morsestraat 32, 6716 AH  
Ede, The Netherlands  
T +31-318-648282  
F +31-318-648288  
www.chromaeu.com  
salesnl@chromaeu.com

CHROMA ATE GERMANY  
Südtiroler Str. 9, 86165,  
Augsburg, Germany  
T +49-821-790967-0  
F +49-821-790967-600  
www.chromaeu.com  
salesde@chromaeu.com

JAPAN  
CHROMA JAPAN  
CORP.  
888 Nippa-cho,  
Kouhoku-ku,  
Yokohama-shi,  
Kanagawa,  
223-0057 Japan  
T +81-45-542-1118  
F +81-45-542-1080  
www.chroma.co.jp  
info@chroma.co.jp

KOREA  
CHROMA ATE  
KOREA BRANCH  
3F Richtogether  
Center, 14,  
Pangyoyeok-ro 192,  
Bundang-gu,  
Seongnam-si,  
Gyeonggi-do  
13524, Korea  
T +82-31-781-1025  
F +82-31-8017-6614  
www.chromaate.com  
info@chromaate.com

CHINA  
CHROMA ATE  
(SUZHOU) CO., LTD.  
Building 7, ShiShan  
Industrial Gallery,  
No. 855, Zhu Jiang Rd.,  
Suzhou New District,  
Jiang Su, China  
T +86-512-6824-5425  
F +86-512-6824-0732

SOUTHEAST ASIA  
QUANTEL PTE LTD.  
(A company of Chroma Group)  
25 Kallang Avenue #05-02  
Singapore 339416  
T +65-6745-3200  
F +65-6745-9764  
www.quantel-global.com  
sales@quantel-global.com