

## **PS9905, PS9924**

---

---

### ● SEMKO Certificate

Standard            EN 60065, IEC 60065  
                          EN 60950, IEC 60950

Reference No.    1122994

---



H.TAKAHASHI

Department Manager  
Optical Device Engineering  
Technical Marketing Department  
Compound Semiconductor Devices Business Division  
Analog & Power Devices Business Unit  
Renesas Electronics Corporation

# Certificate




for European Product Safety

Reference No. 1122994

## Optoinsulator for bridging of reinforced insulation

Type designation	PS9905, PS9924
Certificate holder	<b>Renesas Electronics Corporation Compound Semiconductor Devices Quality Assurance Department 1753, Shimonumabe, Nakahara-ku Kawasaki, Kanagawa 211-8668 JAPAN</b>
The product complies with the standard(s)	EN 60065:2002+A1+A11+A2+A12 EN 60950-1:2006 and A11+A1+A12 IEC 60065:2001 and A1-A2 IEC 60950-1:2005 and A1
Date of expiry	13 December 2016

Additional information in Appendix.

Certification Body	Intertek Semko AB, Product Certification	Place	Kista - Stockholm
Signed	 _____ Niclas Lood	Date	13 December 2011 Page 1 of 3



Intertek  
**Appendix**

Reference No. 1122994

*Technical data*

Type designation PS9905, PS9924

Note The samples is marked 9905 respectively 9924.

For a RMS working voltage up to 725V, pollution degree 2 and material group IIIa or IIIb.  
Max operating temperature 110°C

The following tests have been performed with positive result:

General

- Creepage distance between input and output : >14.5mm
- Distance through insulation : >0.4 mm
- Internal creepage distance not measured, tests according to EN 60950 2.10.11 have been performed with positive result.
- Humidity test : 48h. in 93% relative humidity. Electric strength test 3000 V/1 min.

Special tests according to EN 60950

- Thermal cycling test. 10 cycles. Each cycle : 68 h in 110°C, 1 h in 25°C, 2h in 0°C and 1h in 25°C.  
After the cycling test a humidity test for 48 h in 93% relative humidity.  
Electric strength test between input and output 5000 V/1 minute

After judgement from case to case, the opto-insulator can bridge basic, supplementary, double or reinforced insulation, provided that the ratings in data sheet are not exceeded in normal operation or under fault conditions in the appliance.

*This Certificate is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this certificate. Only the Client is authorized to permit copying or distribution of this certificate and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.*

2



**Intertek**  
**Appendix**

Reference No. 1122994

*Manufacturing site(s)*

Kyushu Denshi Co., Ltd.  
89, Nagasaki Shiranui-machi  
Uki-shi Kumamoto  
869-0562  
JAPAN

*Certification Body*

Intertek Semko AB, Product Certification

*Place* Kista - Stockholm

*Signed*

  
\_\_\_\_\_  
Niclas Lood

*Date* 13 December 2011

*This Certificate is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this certificate. Only the Client is authorized to permit copying or distribution of this certificate and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.*