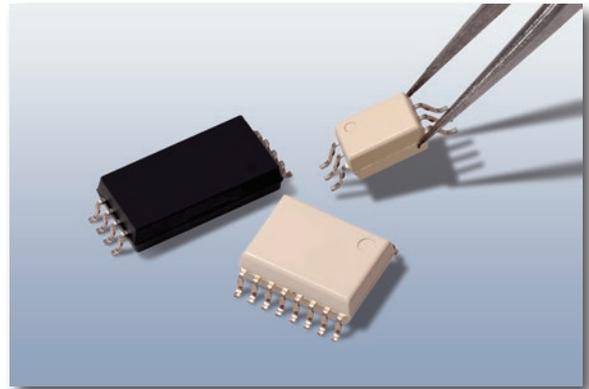


Release No. CEL139

CEL Expands Its Formidable Optocoupler Offering with Three New Renesas Devices Targeting Industrial Controls and Inverter Applications

Santa Clara, CA — June 17, 2013 — Renesas Electronics and California Eastern Laboratories (CEL) introduce three isolated gate drive optocouplers which were specifically designed to meet the demanding isolation requirements of motor controls and drives, industrial inverters and induction heating equipment. Each variant optimizes a different feature set which allows end users to select the ideal component for their specific applications.



Key Features

Geared specifically for the industrial market, the entire family extends the upper temperature limit to 110°C – providing 5°C to 10°C more headroom over competitive products. Each variant also yields a Common Mode Transient Immunity (CMTI) of 25 kV/μs, a level that is up to 2.5x greater than alternatives.

The PS9905 delivers the greatest creepage distance within the family with a rating of 14.5mm – a 40% improvement over the closest competitive product. This exceptional level allows the end user to design 690V or greater drives while complying with IEC standards. Essentially this device replaces two optocouplers in traditional designs with a single isolator, thereby reducing the overall footprint by 30%. As shown in the table below, the PS9905 also provides best-in-class performance for size, temperature performance and power dissipation.

The PS9308 offers the smallest form factor of the family, using only half the space of a standard 8-pin DIP. In addition, this device provides the lowest current, fastest switching speed, and industry-leading noise immunity (i.e. CMTI performance).

The PS9402 adds desaturation detection and active Miller clamping to the optocoupler lineup, while offering excellent noise immunity, reduced current draw and expanded temperature ratings. Each of these differentiating features makes the PS9402 an ideal device for driving IGBTs and Power MOS FETs.

Device	CMT (kV/μs)	Creepage Distance (mm)	Switching Speed (μs)	Supply Current (mA)	Max Temp. Rating (°C)	Desaturation Detection	Active Miller Clamping	Size (mm ²)
PS9905	25	14.5	0.15	3	110	NO	NO	112
PS9308	25	8	0.25	2	110	NO	NO	45
PS9402	25	8	0.2	3	110	YES	YES	107

Competitive Rating: Best in Class

Family Ratings: Good Better Best

Pricing, Packaging and Availability

Samples are available now at CEL. Pricing and packaging options are as follows:

PS9905: \$5.90 @ 2.5k pcs [6-pin 6.7mm x 16.7mm LSDIP]

PS9308: \$1.58 @ 2.5k pcs [6-pin 4.6mm x 9.7mm SDIP & 6-pin 4.6mm x 11.5mm SDIP]

PS9402: \$4.70 @ 2.5k pcs [16-pin 10.3mm x 10.4mm SSOP]

Contact Us

For more information on this new series of optocouplers, please visit:

www.cel.com/PS9905

www.cel.com/PS9308

www.cel.com/PS9402

The PS9905, PS9308, and PS9402 are an integral part of CEL's extensive optocoupler portfolio.

Visit <http://www.cel.com/opto> for additional details on CEL's complete offering of optocouplers and solid state relays.

Editors, please contact Larry Sisken at larry.sisken@cel.com or 408-919-2275 for further information or to arrange a technical briefing.

Readers, please call your local CEL Sales office. Simply click on [Sales Office](#) for a complete listing of worldwide contacts.

About CEL

California Eastern Laboratories (CEL) is the exclusive sales and marketing partner in the Americas for products made by the Compound Semiconductor Devices Business Division (CSDBD) of Renesas Electronics Corporation, formerly NEC Electronics Corporation. These products include [RF components and RFICs](#), [optocouplers](#), [solid state relays](#), and [laser diodes and photo detectors](#).

CEL serves designers, OEMs and contract manufacturers in the RF & Wireless, Mobilecomm, Multimedia, Broadband Communications, Industrial Control, and Automated Test Equipment (ATE) markets. With over 50 years experience in high frequency design, customer support and fulfillment, CEL is ideally positioned to provide its customers with solutions tailored to meet their specific needs.

CEL maintains extensive inventories and provides engineering and applications assistance at its technical centers in Santa Clara, CA and Wauconda, IL. The company supports customers through sales offices, sales representatives and distributors in numerous locations. Visit us at: www.cel.com.