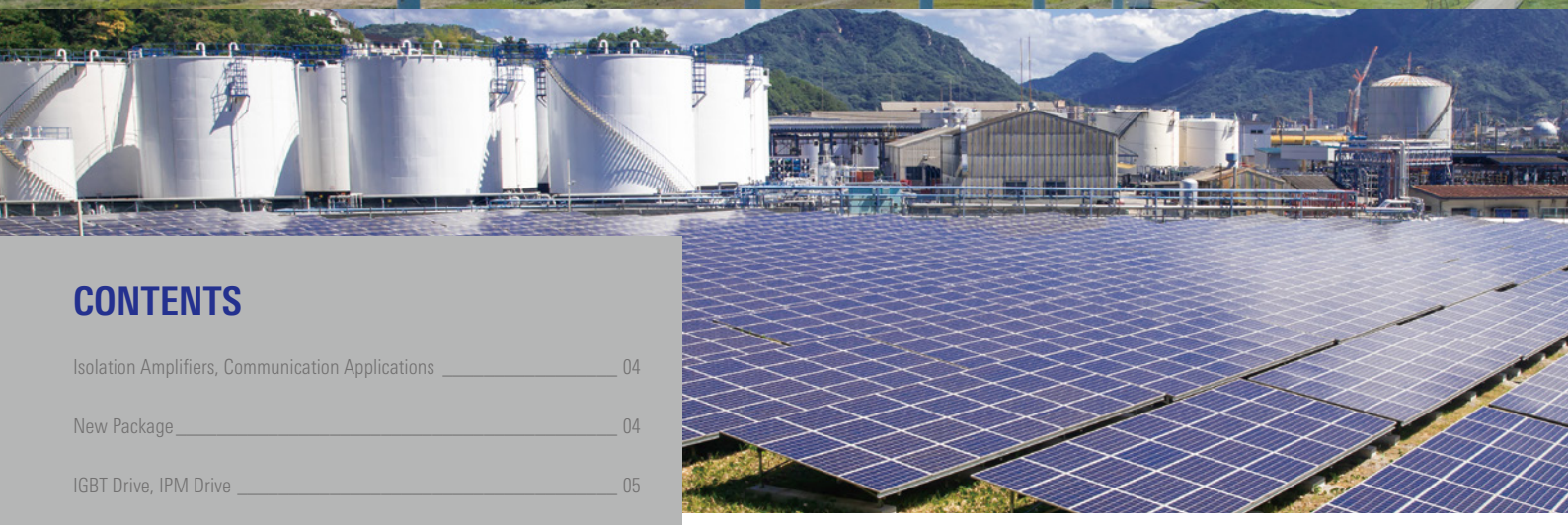
PHOTOCOUPLERS

CATALOG

2024.03

RENESAS PHOTOCOUPLERS CONTRIBUTE TO THE REALIZATION OF INDUSTRIAL SYSTEMS THAT ARE SAFE, EFFICIENT, AND ENVIRONMENTALLY FRIENDLY.



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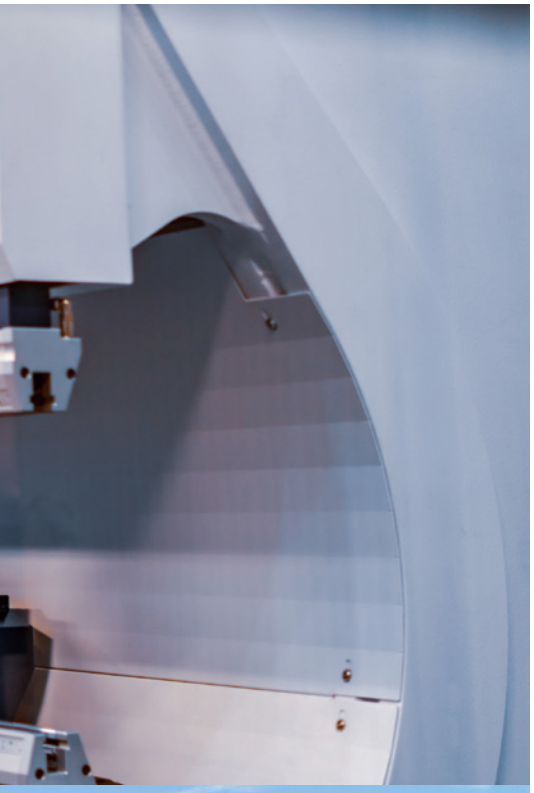


In manufacturing and industrial settings, photocouplers convey control signals while shielding persons and control systems from high voltages. Renesas photocouplers enable isolation of high voltages in solar and wind power generation systems, and in inverters that convert DC power to AC they enable accurate signal transfer and help improve power efficiency. The lineup includes products with integrated functionality for protecting the IGBTs used in inverter circuits. Also available are high-precision isolation amplifiers, for accurate voltage monitoring and motor control, and IC- or transistor-output products, which isolate microcontrollers and control devices while allowing high-speed signal transfer. Renesas photocoupler products deliver improved efficiency in manufacturing and industrial applications while contributing to safe and stable operation.

Isolation Amplifiers, Communication Applications

Δ-Σ Modulators, Isolation Amplifiers

RV1S9353A, RV1S9355A, RV1S9356A Δ-Σ Modulator/PS8352A Isolation Amplifier

Contributes to highly precise motor control with high precision and high input resistance.

(Δ-Σ Modulator & Very High Precision Isolation Amplifier)

- Contribution

  Direct connection to RZ/T and RX72M
- Features

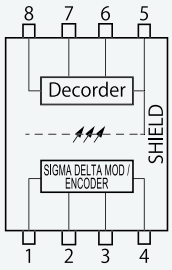
  -Output clock 20MHz TYP.

  -High SNR 88dB TYP.

  -Low offset temperature drift Small

  1uV/°C MAX.

ΔΣ Modulator (RV1S9355A)



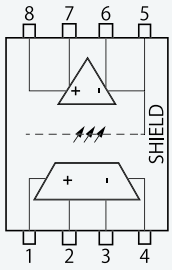
- Contribution

  High-precision feedback
- Features

  -High precision: Gain ± 1% MAX.

  -High input resistance: 450 kΩ

Analog output (PS8352A)



Transistor output coupler for ultra-low input current

Input current IF=50 μA drive RV1S2x51A, RV1S2x55A

- Contribution

  The high CTR in the low input current region enables low power consumption of the application and control of multiple photocouplers by an MCU.
- Features

  -High CTR 300% or more

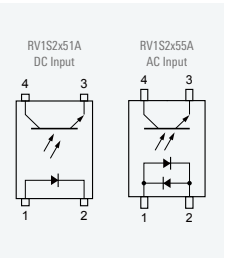
  -High temperature compatible 115°C

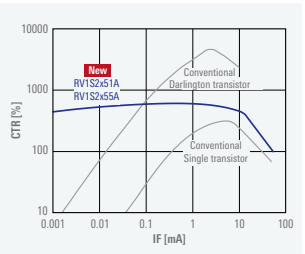
  -Creepage distance/Pin pitch

  15/1.27mm (RV1S2451A)

  8.2/1.3mm (RV1S225xA)

  4/1.27mm (RV1S295xA)





4 channel transistor output coupler

World's smallest class

PS284x-4x

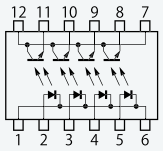
- Advantages

  Compact I/O
- Features

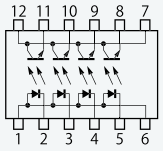
  Low input

  4-channel package

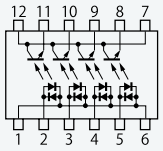
PS2841-4A



PS2841-4B



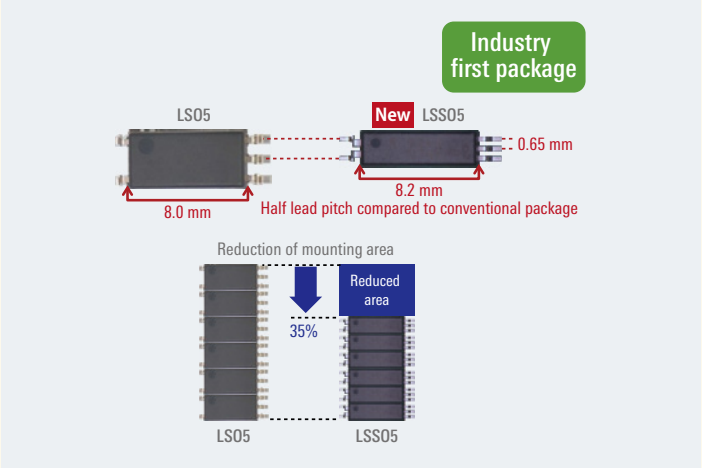
PS2845-4A



New Package

LSSO5(5pin)/LSSOP(4pin)

- Downsizing while maintaining long creepage 8.2 mm (35% reduction in mounting area compared to LSO5)
- Lineup: 15 Mbps, IPM drive, IGBT drive, Transistor output



IGBT Drive, IPM Drive

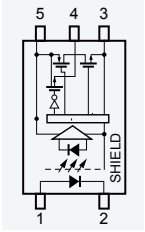
IGBT Drive RV1S9x9xA, IPM Drive RV1S9x61A, RV1S9x62A

Reduced IGBT switching loss contributes to improved inverter efficiency, better real-time performance and downsizing.

- Contribution
  IGBT on-off operation at high dv/dt
- Features
  -Iopeak
  4A (RV1S9x91A, RV1S9x92A)
  10A (RV1S9993A, RV1S9994A)
  -Small PDD 35ns MAX.
  -High CMTI ± 100kV/us MIN.

■IGBT drive

RV1S9291A etc.
(4A output)

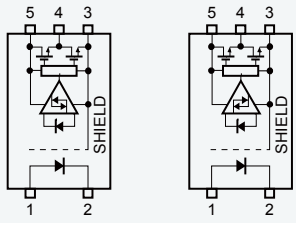


- Contribution
  Can be connected to 15V IPM input
- Features
  (RV1S9x61A, RV1S9x62A)
  -Small PDD 25ns MAX.
  -High CMTI ±100kV/μs MIN.
  -High-temperature operation:
  Ta = 125°C max.

■IPM drive

RV1S9x61A etc.
(Totem Pole output
Active High)

RV1S9x62A
(Totem Pole output
Active Low)

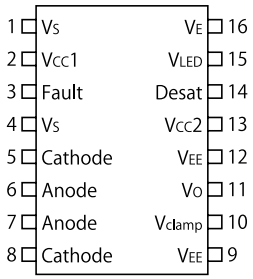


IGBT Drive with Protection Functions

PS9402 IGBT drive coupler with protection functions

Integrated peripheral functions for reduced board area
(IGBT gate driver with protection functions)

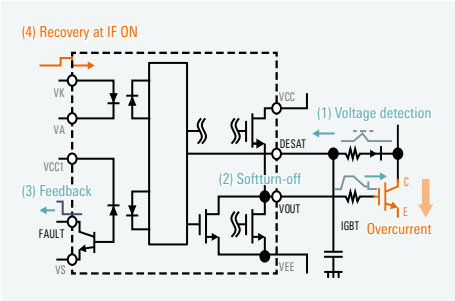
- Advantages
  Lower design and board costs due to reduced need for external protection circuits and elimination of negative power supply
- Features
  Two on-chip protection functions
  - Desat (desaturation detection)
  - Active Miller clamp



Desat

Protects the IGBT from damage from overcurrent.

(1) Detects rise in the collector voltage due to overcurrent.
(2) Softturn-off of Vout (IGBT gate).
(3) Fault feedback to the MCU.
(4) Operation recovery when IF input turns on again.

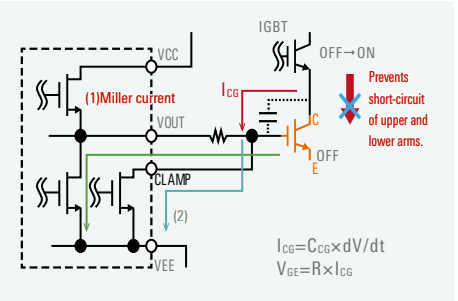


Active Miller clamp

Prevents short-circuit of upper and lower arms if IGBT turns on erroneously.

The displacement current (Miller current(1) *) when the upper arm turns on is drawn off by the clamp circuit(2) , preventing erroneous on-switching.

* Current (ICG) that flows to the Miller capacitance between the collector and gate of the IGBT

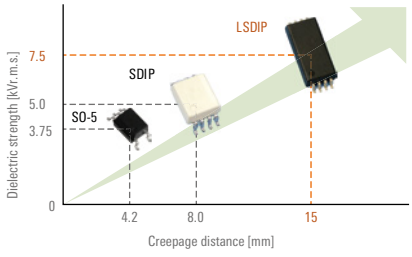


LSDIP

Advanced package for high-voltage systems
(Package with very long creepage of 15 mm)

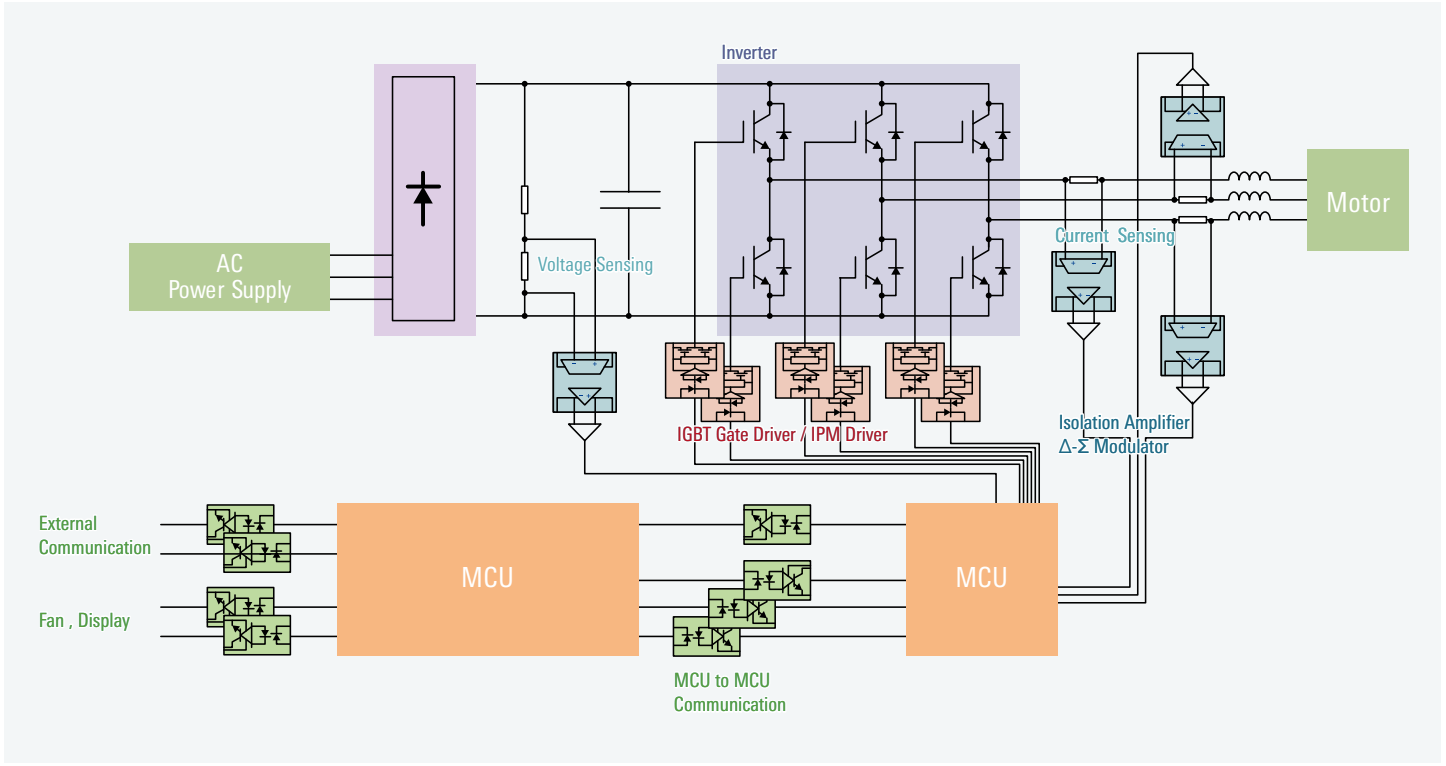
- Features
  Long creepage of 15 mm
  High dielectric strength: 7.5 kV r.m.s.
  High surge resistance: 12 kV allowable transient voltage
- Advantages
  Less board space is needed to ensure isolation.
  Enables smaller boards for large-capacity battery control.
  Simplifies high-voltage feedback.

- Lineup
  · PS9905(2.5A), RV1S999xA(4A/10A) for IGBT drive
  · RV1S9960A for 15Mbps high-speed communication
  · PS9924 for 10 Mbps high-speed communication
  · PS8902 for 1 Mbps analog
  · Transistor output coupler for ultra-low input current RV1S2451A
- Application
  · 1500V Solar inverter
  · 690V Industrial inverter
  · 480V Medical equipment

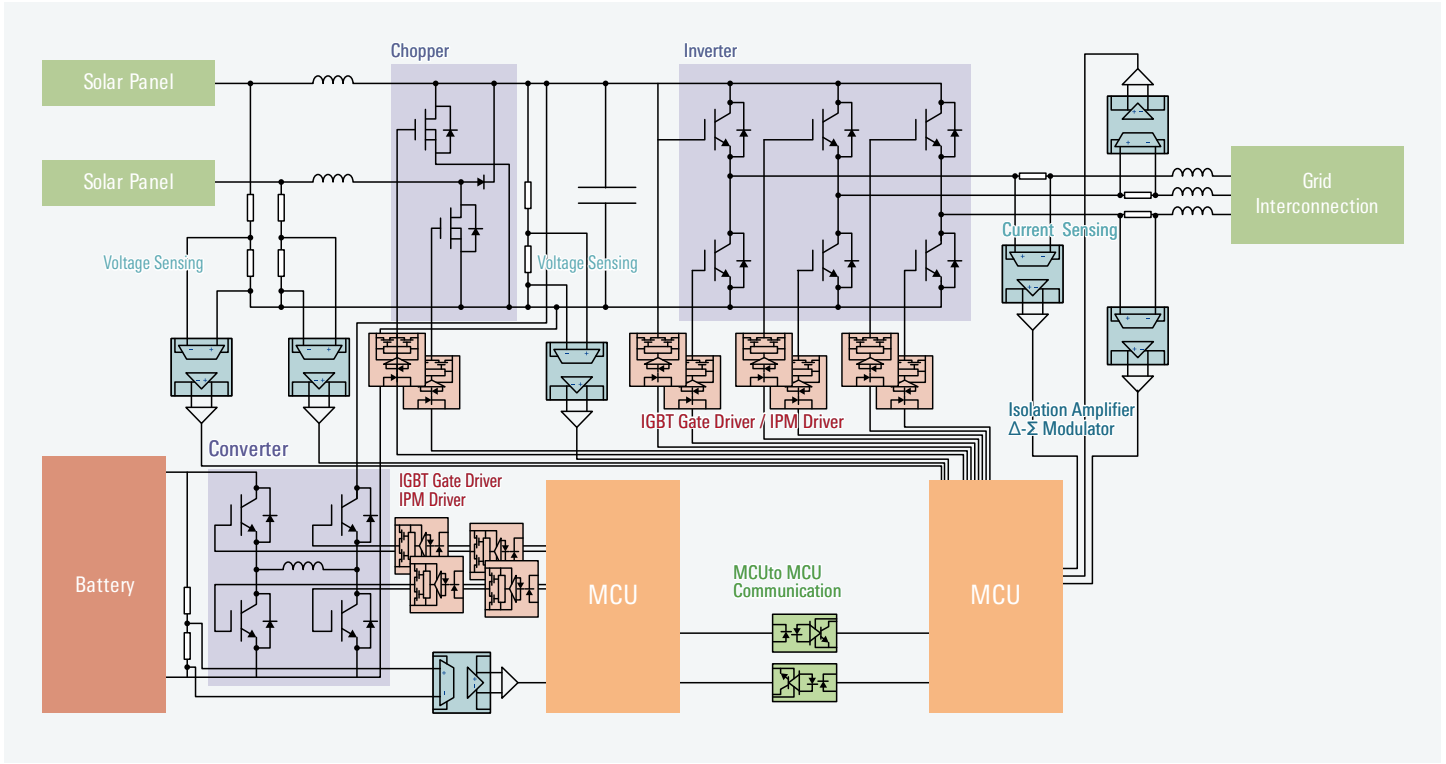


Application Examples

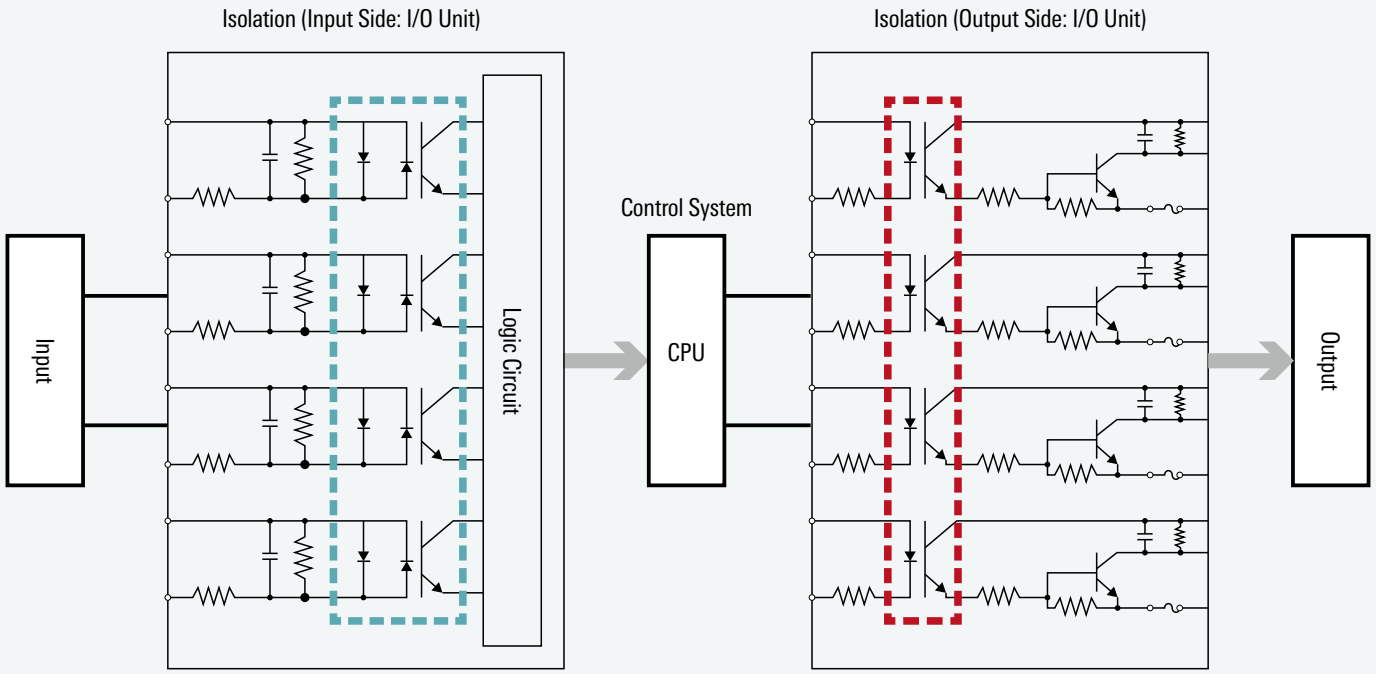
Motor Solution



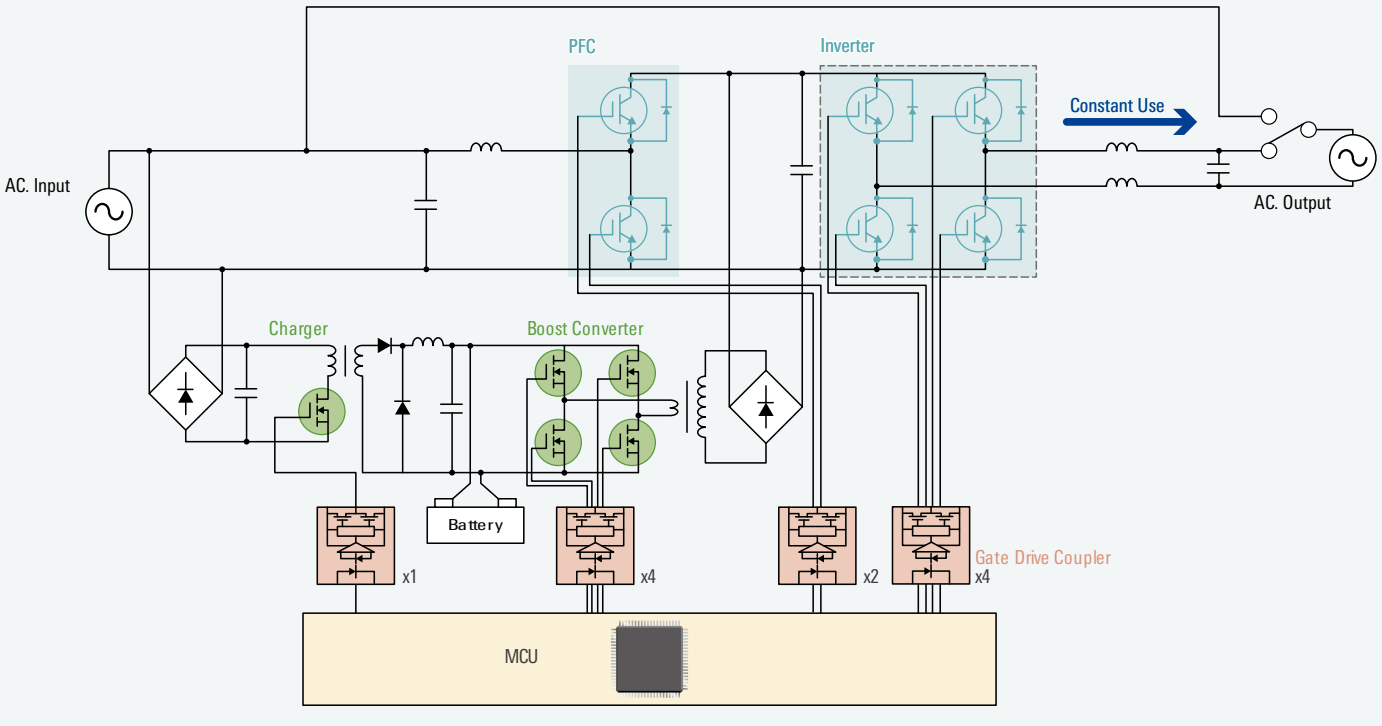
Power Control + Storage Battery



PLC


Isolation (Input Side: I/O Unit)
Isolation (Output Side: I/O Unit)
Input
Logic Circuit
Control System
CPU
Output

UPS


PFC
Inverter
Constant Use
AC. Input
AC. Output
Charger
Boost Converter
Battery
x1
x4
x2
x4
Gate Drive Coupler
MCU

Product Lineup

The extensive lineup extends from high-speed products for motor drive of communication applications to general-purpose transistor-output products.

IC-Output

Creepage
Isolation Voltage
Pin pitch

Function	Output	V_{CC}/V_{DD}
Motor drive	IGBT drive	Digital	35V,10A
			35V,4A
			35V, 2.5 / 2.0A
			35V,0.6A
	IPM drive	Digital	>20V
Current/ voltage detection	Isolation Amp.	Analog	5V
	Δ-Σ Modulator	Digital	5V
			5V,3.3V
Communication	15Mbps	CMOS	5V
			5V,3.3V
		Totem Pole	5V
	10Mbps	Open Collector	5V
			5V,3.3V
	1Mbps	Digital	5V,3.3V
		Analog	35V

DIP8 7/8 mm 5 kV 2.54 mm	SDIP6/8 7/8 mm 5 kV 1.27 mm	LSDIP8 15 mm 7.5 kV 1.27 mm	LSO5 8 mm 5 kV 1.27 mm	SO5 4.2 mm 3.75 kV 1.27 mm	LSSO5 8.2 mm 5 kV 0.65 mm	SO8 4 mm 2.5 kV 1.27 mm	SO16 8 mm 5 kV 1.27 mm
		RV1S9993A RV1S9994A					
		RV1S9991A RV1S9992A	RV1S9091A RV1S9092A		RV1S9291A RV1S9292A		
PS9531	PS9331 PS9332	PS9905	PS9031		RV1S9231A		PS9402
PS9506	PS9307A				RV1S9207A		
PS9513	PS9313 PS9303 PS9309		PS9013 RV1S9062A PS9009 RV1S9061A	PS9113 RV1S9162A RV1S9161A	RV1S9213A RV1S9262A RV1S9209A RV1S9261A		
PS8551A	PS8352A						
PS9551A							
	RV1S9353A RV1S9355A RV1S9356A						
	PS9351			PS9151		PS9851-1 PS9851-2	
		RV1S9960A	RV1S9060A	RV1S9160A	RV1S9260A		
				PS9123			
PS9587	PS9317		PS9001	PS9117A		PS9817A-1 PS9817A-2	
	PS9324	PS9924		PS9124		PS9821-1 PS9821-2	
				PS9122		PS9822-1 PS9822-2	
PS8501 PS8502	PS8302	PS8902		PS8101		PS8802-1 PS8802-2	

Transistor-Output

Creepage
Isolation Voltage
Pin pitch

Input	Output	Function
DC	Single	General purpose
		High temperature: 110°C, 115°C
		High voltage tolerance: 120V
		Low input
		High speed (20kbps)
	Darlington	General purpose
		High voltage tolerance: 350V
AC	Single	General-purpose
		Low input
	Darlington	General purpose

DIP4 7/8 mm 5 kV 2.54 mm	LSOP 8 mm 5 kV 2.54 mm	SOP 5 mm 3.75 kV 2.54 mm	LSSOP 8.2 mm 5 kV 1.3 mm	LSDIP8 15 mm 7.5 kV 1.27 mm	SSOP 4/4.5/5 mm 1.5/2.5/3.75 kV 0.8/1.27 mm	Flat lead 4 mm 2.5 kV 1.27 mm
		PS2701A-1			PS2801C-1/4	
PS2561D-1 PS2561F-1	PS2381-1	PS2761B-1	RV1S2281A		PS2861B-1	
		PS2703-1				PS2913-1
		PS2711-1	RV1S2211A RV1S2251A	RV1S2451A	PS2811-1/4 PS2841-4A/4B	PS2911-1 RV1S2951A
PS2514-1						
PS2562-1		PS2702-1			PS2802-1/4	
PS2533-1 PS2535-1		PS2733-1			PS2833-1/4	PS2933-1
PS2565-1		PS2705A-1	RV1S2285A		PS2805C-1/4	
		PS2715-1	RV1S2255A		PS2815-1/4 PS2845-4A	PS2915-1 RV1S2955A
PS2506-1		PS2706-1				

IGBT Drive

Function	Part No.	Output Peak Current [A]	Power Supply Voltage [V]	Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Electrical Characteristics					Protection Functions		
								DC	SW				Protection		
				Configu-ration	Creepage Distance [mm]			IFLH max. [mA]	tpHL,LH max. [ns]	PWD max. [ns]	PDD [ns]	CMTI min. [kV/µs]	UVLO	Clamp	Desat
IGBT Drive	PS9307A	0.6	10 to 30	SDIP6	L:7 L2:8	5000	125	5.0	150	50	-80 to 80	50	○	–	–
	RV1S9207A			LSSO5	8.2	5000	125	5.0	150	50	-80 to 80	50	○	–	–
	PS9506			DIP8	-/L3:7 L1/L2:8	5000	110	7.0	400	250	-300 to 300	25	–	–	–
	PS9031	2.5	15 to 30	LSO5	8	5000	125	4.0	175	75	-90 to 90	50	○	–	–
	RV1S9231A			LSSO5	8.2	5000	125	5.2	175	75	-90 to 90	50	○	–	–
	PS9331			SDIP6	L:7 L2:8	5000	125	4.0	175	75	-90 to 90	50	○	–	–
	PS9531			DIP8	-/L3:7 L1/L2:8	5000	125	4.0	175	75	-90 to 90	50	○	–	–
	PS9905			LSDIP8	15	7500	110	6.0	150	75	-100 to 100	25	○	–	–
	PS9332	2	15 to 30	SDIP8	L:7 L2:8	5000	125	4.0	200	75	-90 to 90	50	○	○	–
	PS9402	2.5	15 to 30	SO16	8	5000	110	5.0	200	100	-100 to 100	25	○	○	○
	RV1S9091A	4	10 to 30	LSO5	8	5000	125	6.0	95	35	-35 to 35	100	○	–	–
	RV1S9092A		13 to 30	LSO5	8	5000	125	6.0	95	35	-35 to 35	100	○	–	–
	RV1S9291A		10 to 30	LSSO5	8.2	5000	125	6.0	95	35	-35 to 35	100	○	–	–
	RV1S9292A		15 to 30	LSSO5	8.2	5000	125	6.0	95	35	-35 to 35	100	○	–	–
	RV1S9991A		10 to 30	LSDIP8	15	7500	125	8.0	95	35	-35 to 35	100	○	–	–
	RV1S9992A		15 to 30	LSDIP8	15	7500	125	8.0	95	35	-35 to 35	100	○	–	–
	RV1S9993A	10	10 to 30	LSDIP8	15	7500	125	8.0	95	35	-35 to 35	100	○	–	–
	RV1S9994A		15 to 30	LSDIP8	15	7500	125	8.0	95	35	-35 to 35	100	○	–	–

IPM Drive

Function	Part No.	Output Type	Logic	Package		Recommended Operating Conditions	Absolute Maximum Ratings		Electrical Characteristics				
									DC	SW			
				Configu-ration	Creepage Distance [mm]	Power Supply Voltage [V]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	IFHL/LH max. [mA]	tpHL/LH max. [ns]	PWD max. [ns]	PDD max. [ns]	CMTI min. [kV/µs]
IPM Drive	RV1S9161A	Totem Pole	Active High	SO5	4.2	4.5 to 30	3750	125	3.0	60	20	25	100
	PS9009			LSO5	8	4.5 to 20	5000	125	3.0	200	80	100	50
	RV1S9061A					4.5 to 30	5000	125	4.5	60	20	25	100
	RV1S9209A			LSSO5	8.2	4.5 to 20	5000	125	3.8	200	80	100	50
	RV1S9261A					4.5 to 30	5000	125	4.0	60	20	25	100
	PS9309			SDIP6	L:7 L2:8	4.5 to 20	5000	110	3.0	200	80	80	15
	PS9303			SDIP6	L:7 L2:8	4.5 to 20	5000	100	5.0	500	350	–	15
	RV1S9162A		Active Low	SO5	4.2	4.5 to 30	3750	125	3.0	60	20	25	100
	RV1S9062A			LSO5	8	4.5 to 30	5000	125	4.1	60	20	25	100
	RV1S9262A			LSSO5	8.2	4.5 to 30	5000	125	4.0	60	20	25	100
	PS9513	Open Collector		DIP8	-/L3:7 L1/L2:8	4.5 to 20	5000	100	5.0	500 750	650	650	15
	PS9013			LSO5	8	4.5 to 25	5000	125	5.0	500 750	650	650	50
	RV1S9213A			LSSO5	8.2	4.5 to 25	5000	125	5.0	500/750	650	650	50
	PS9313			SDIP6	L:7 L2:8	4.5 to 20	5000	110	5.0	500 750	650	650	15
	PS9113			SO5	4.2	4.5 to 20	3750	100	5.0	500 750	650	650	15

Isolation Amplifiers

Function	Part No.	Output	Package		Absolute Maximum Ratings		Electrical Characteristics							
			Configuration	Creepage Distance [mm]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Input Voltage Linearity Range [mV]	Gain typ. [V/V]	Gain Error Max.[%]	NL typ. [%]	VDD2 [V]	CMTI min. [kV/μs]	fc typ. [kHz]	Output Type
Isolation amplifier	PS8551A	Analog	DIP8	8	5000	105	-200 to 200	8	1	0.014	5	10	100	Differential
	PS8352A		SDIP8	8	5000	110	-200 to 200	8	1	0.014	5	10	100	Differential

Δ-Σ Modulators

Function	Part No.	Output	Package		Absolute Maximum Ratings		Electrical Characteristics						
			Configuration	Creepage Distance [mm]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Input Voltage Linearity Range [mV]	Gain Error Max.[%]	INL typ. [LSB]	VDD2 [V]	ENOB typ. [bits]	CMTI min. [kV/μs]	fCLK typ. [MHz]
Δ-Σ Modulators	PS9551A	Digital	DIP8	8	5000	105	-200 to 200	1	3	5	12	15	10
	RV1S9353A		SDIP8	8	5000	110	-200 to 200	0.5	3	3.3/5	13.8	15	10
	RV1S9355A		SDIP8	8	5000	125	-250 to 250	0.5	3	3.3/5	14	50	20
	RV1S9356A		SDIP8	8	5000	125	-250 to 250	0.5	3	3.3/5	14	50	20

High-Speed Communication (Analog)

Function	Part No.	Speed [bps]	Output Type	Absolute Maximum Rated Power Supply Voltage [V]	Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Electrical Characteristics						
									Detector				Coupled		
					Configuration	Creepage Distance [mm]			IOH @Vcc30V max. [μA]	VOL max. [V]	ICCL typ. [μA]	ICCH max. [μA]	CTR@ IF 16mA Vcc 4.5V Vo 0.4V [%]	tpHL/LH max. [ns]	CMTI min. [kV/μs]
High-Speed Communication (Analog)	PS8101	1M	Open Collector	35	SO5	4.2	3750	100	100	0.4	50	2	15 to 35	800/1200	15
	PS8802-1/-2				SO8	4.0	2500	100	100	0.4	100/200	2/4	15 and Over	800/1200	15
	PS8302				SDIP6	L:7 L2:8	5000	110	100	0.4	150	1	15 and Over	800/800	15
	PS8501				DIP8	-/L3:7 L1/L2:8	5000	100	100	0.4	150	1	15 and Over	800/800	-
	PS8502								100	0.4	150	1	15 and Over	800/800	15
	PS8902				LSDIP8	15	7500	110	100	0.4	50	2	15 to 35	800/1200	15

High-Speed Communication (Digital)

Function	Part No.	Speed [bps]	Output Type	Power Supply Voltage [V]	Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	DC			AC				
					Configuration	Creepage Distance [mm]			VOL max. [V]	VOH min. [V]	ICCL/H max. [mA]	IFHL max. [mA]	tpHL/LH max. [ns]	PWD max. [ns]	tpsk max. [ns]	CMTI min. [kV/μs]
High-Speed Communication (Digital)	PS9122	1M	Open Collector	N 2.7~3.6, L 4.5~5.5	SO5	4.2	3750	100	0.6	–	3.5/2.5	5.0	500/700	200	–	15
	PS9822-1/-2				SO8	4.0	2500	100	0.6	–	3.5/2.5	5.0	500/700	200	–	–
	PS9124	10M	Open Collector	2.7~3.6 & 4.5~5.5	SO5	4.2	3750	110	0.6	–	10/7	3.0	100/100	35	40	10
	PS9324				SDIP6	L:7 L2:8	5000	110	0.6		10/7	3.0	100/100	35	40	15
	PS9924				LSDIP8	15	7500	110	0.6	–	10/7	5.0	100/100	35	40	15
	PS9821-1/-2			2.7~3.6	SO8	4.0	2500	85	0.6	–	10/7	5.0	100/100	35	40	15
	PS9587			4.5~5.5	DIP8	-/L3:7 L1/L2:8	5000	85	0.6	–	11/8	5.0	100/100	50	60	15
	PS9317				SDIP6	L:7 L2:8	5000	85	0.6	–	10/7	5.0	75/75	35	40	15
	PS9001				LSO5	8.0	5000	125	0.6	–	2/2	4.0	100/100	50	60	50
	PS9117A				SO5	4.2	3750	85	0.6	–	10/7	5.0	100/100	35	40	15
	PS9817A-1/-2				SO8	4.0	2500	85	0.6	–	10/7	5.0	100/100	35	40	15
	PS9123	15M	Totem Pole	4.5~5.5	SO5	4.2	3750	100	0.6	2.4	10/7	5.0	60/60	30	–	15
	PS9151		CMOS	4.5~5.5	SO5	4.2	3750	100	0.1	4.0	5/5	5.0	60/60	30	40	15
	RV1S9160A			2.7~5.5	SO5	4.2	3750	125	0.1	V_{DD}-0.1	2/2	2	60/60	20	25	50
	PS9851			4.5~5.5	SO8	4.0	2500	100	0.1	4.0	5/5	6.0	60/60	30	40	10
	RV1S9060A			2.7~5.5	LSO5	8	5000	125	0.1	V_{DD}-0.1	2/2	2.2	60/60	20	25	50
	RV1S9260A			2.7~5.5	LSSO5	8.2	5000	125	0.1	V_{DD}-0.1	2/2	2.6	60/60	20	25	50
	PS9351			4.5~5.5	SDIP6	L:7 L2:8	5000	100	0.1	4.0	5/5	5.0	60/60	30	40	15
	RV1S9960A			2.7~5.5	LSDIP8	15	7500	110	0.1	V_{DD}-0.1	2/2	3.8	60/60	20	25	50

Transistor-Output (DC Input) Single

Function	Part No.	Output Type	Package		Absolute Maximum Ratings				Electrical Characteristics				
									DC	SW			
			Configuration	Creepage Distance [mm]	VCEO max. [V]	IC max. [mA]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	CTR %	tr typ. [µs]	tf typ. [µs]	ton typ. [µs]	toff typ. [µs]
Transistor-Output (DC Input)	PS2561D-1	Single	DIP4	-/L:7 L1/L2:8	80	50	5000	110	50 to 400	3	5	–	–
	PS2561F-1		DIP4	7	80	50	5000	110	300 to 600	5	7	–	–
	PS2514-1		DIP4	7	40	20	5000	100	50 to 200	–	–	15	15
	PS2381-1		LSOP4	8	80	50	5000	115	50 to 400	4	5	–	–
	RV1S2281A		LSSOP	8.2	80	30	5000	115	50 to 400	4	5	–	–
	PS2701A-1		SOP4	5	70	30	3750	100	50 to 300	5	7	8	10
	PS2761B-1		SOP4	5	70	50	3750	110	50 to 400	4	5	8	5
	PS2703-1		SOP4	5	120	30	3750	100	50 to 400	10	10	13	11
	PS2711-1		SOP4	5	40	40	3750	100	100 to 400	4	5	–	–
	PS2801C-1		SSOP4	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2801C-4		SSOP16	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2861B-1		SSOP4	5	70	50	3750	110	50 to 300	4	5	5	5
	PS2811-1		SSOP4	4.5	40	40	2500	100	100 to 400	4	5	7	5
	PS2811-4		SSOP16	4.5	40	40	2500	100	100 to 400	4	5	7	5
	RV1S2211A		LSSOP	8.2	40	40	5000	115	100 to 400	4	5	–	–
	RV1S2251A		LSSOP	8.2	40	80	5000	115	300 to 1000	5	6	–	–
	RV1S2451A		LSDIP8	15	40	80	7500	115	300 to 1000	5	6	–	–
	PS2841-4A		SSOP Common Leads	4	70	20	1500	100	100 to 400	–	–	20	110
	PS2841-4B		SSOP Common Leads	4	70	20	1500	100	100 to 400	–	–	20	110
	PS2911-1		Flat Leads	4	40	40	2500	100	100 to 400	5	10	40	120
	PS2913-1		Flat Leads	4	120	30	2500	100	50 to 200	10	10	80	50
	RV1S2951A		Flat Leads	4	40	80	2500	115	300 to 800	5	6	–	–

Transistor-Output (DC Input) Darlington

Function	Part No.	Output Type	Absolute Maximum Ratings		Package		Isolation Voltage [Vr.m.s.]	Ta max. [°C]	Electrical Characteristics						
									DC			SW			
			VCEO [V]	IC [mA/ch]	Configuration	Creepage Distance [mm]			CTR min. [%]	CTR max. [%]	VCE SAT [V]	tr typ. [µs]	tf typ. [µs]	ton typ. [µs]	toff typ. [µs]
Transistor-Output (DC Input)	PS2802-1	Darlington	40	90	SSOP4	4.5	2500	100	200	–	1.0	200	200	–	–
	PS2802-4			100	SSOP16	4.5	2500	100	200	–	1.0	200	200	–	–
	PS2562-1			200	DIP4	7	5000	100	200	–	1.0	100	100	–	–
	PS2702-1			200	SOP4	5	3750	100	200	–	1.0	70	60	90	60
	PS2833-1		350	60	SSOP4	4.5	2500	100	400	4500	1.0	20	5	–	–
	PS2833-4			60	SSOP16	4.5	2500	100	400	4500	1.0	20	5	–	–
	PS2535-1			120	DIP4	7	5000	100	400	5500	1.0	18	5	–	–
	PS2533-1			150	DIP4	7	5000	100	1500	6500	1.0	100	100	–	–
	PS2733-1			150	SOP4	5	2500	100	1500	–	1.0	100	100	–	–

Transistor-Output (AC Input)

Function	Part No.	Output Type	Package		Absolute Maximum Ratings				Electrical Characteristics				
									DC	SW			
			Configuration	Creepage Distance [mm]	VCEO max. [V]	IC max. [mA]	Isolation Voltage [Vr.m.s.]	Ta max. [°C]	CTR %	tr typ. [µs]	tf typ. [µs]	ton typ. [µs]	toff typ. [µs]
Transistor-Output (AC Input)	PS2565-1	Single	DIP4	7	80	50	5000	100	80 to 400	3	5	–	–
	PS2705A-1		SOP4	5	70	30	3750	100	50 to 300	5	7	8	10
	PS2715-1		SOP4	5	40	40	3750	100	100 to 400	4	5	–	–
	PS2805C-1		SSOP4	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2805C-4		SSOP16	4.5	80	30	2500	100	50 to 400	5	7	10	7
	PS2815-1		SSOP4	4.5	40	40	2500	100	100 to 400	4	5	7	5
	PS2815-4		SSOP16	4.5	40	40	2500	100	100 to 400	4	5	7	5
	RV1S2285A		LSSOP	8.2	80	30	5000	115	50 to 400	4	5	–	–
	RV1S2255A		LSSOP	8.2	40	80	5000	115	300 to 1000	5	6	–	–
	PS2845-4A		SSOP Common Leads	4	70	20	1500	100	100 to 400	–	–	20	110
	PS2915-1		Flat Leads	4	40	40	2500	100	100 to 400	5	10	40	120
	RV1S2955A		Flat Leads	4	40	80	2500	115	300 to 800	5	6	–	–
	PS2506-1	Darlington	DIP4	7	40	200	5000	100	200 min.	100	100	–	–
	PS2706-1		SOP4	5	40	200	3750	100	200 min.	200	200	–	–

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