



Discrete Power Semis and Modules Article Archive

This document is a list of articles about discrete power semiconductors and power semiconductor modules published in the How2Power Today newsletter. Products listed here include:

- Power MOSFETs
- IGBTs
- SCRs/thyristors
- Diodes and rectifiers
- Power MOSFET modules
- IGBT modules
- Intelligent power modules
- Gate driver + MOSFET modules

Products are listed here using the following format:

Issue date:

Article title, Part number/product name

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For articles on power ICs, see the Power ICs Article Archives—one lists products by issue and the other by part number.

January 2020:

IGBT Modules Offer 1200-V, 900-A Ratings For Medium Power Drives, Infineon Technologies' FF900R12ME7_B11 and FF900R12ME7P_B11 IGBT modules
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February 2020:

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600-V Superjunction MOSFETs Enable High Power Density, Infineon's CoolMOS PFD7 series superjunction MOSFETs

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March 2020:

Time-Of-Flight Demo Board Showcases GaN Speed In Driving Lasers, Efficient Power Conversion's EPC9144 laser diode driver demo board

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February 2019:

Thyristor Modules Operate At Higher Junction Temperatures, Infineon Technologies Bipolar's Eco Block thyristor modules

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Fast-Recovery Super-Junction MOSFETs Enhance Performance Of Bridge And ZVS Converters, STMicroelectronics' MDmesh DM6 600-V MOSFETs

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AEC-Qualified GaN FETs For Lidar And 48-V Power Systems, EPC's EPC2206 and EPC2212 eGaN devices

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March 2019:

IGBT Power Modules Provide Higher Density And Lower Cost For Industrial Drives, Infineon Technologies' 1200-V TRENCHSTOP IGBT7 modules

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April 2019:

Large Portfolio Of Automotive-Grade SiC MOSFETs For EV Applications, Rohm Semiconductor's SCT3xxxxxHR series SiC MOSFETs

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May 2019:

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SJ MOSFETs Offer Fast Reverse Recovery And Design Flexibility For EV Charging Stations, Home Appliances, ROHM Semiconductor's R60xxJNx 600-V superjunction MOSFETs

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Automotive-Qualified GaN FET Improves Lidar System Resolution, EPC's 80-V EPC2214 eGaN FET

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650-V High-Frequency IGBTs Boost Performance With High-Speed Technology, STMicroelectronics' HB2 650-V IGBT series

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June 2019:

700-V MOSFETs And Schottkys Extend SiC Options For Designers, Microchip Technology's 700-V SiC MOSFETs and 700-V and 1200-V SiC Schottky barrier diodes

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July 2019:

SMD Bridge Rectifiers Save Assembly Costs, Increase Power Density, Taiwan Semiconductor's TBS series SMD bridge rectifiers (TBS406, TBS408, TBS410, TBS606, TBS608, TBS610)

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900-V GaN-on-Si FETs Empower Three-Phase Industrial Power Supplies And Automotive Converters, Transphorm's Gen III TP90H050WS FET

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November 2019:

Half-Bridge Eval Board Demonstrates Benefits Of 650-V GaN HEMTs, GaN Systems' half-bridge GaN daughter board using GaN Systems' 650-V, 30-A GaN E-HEMTs and ON Semiconductor's NCP51820 high-speed gate-driver

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December 2019:

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1200-V Enhancement-Mode GaN Power Devices Challenge SiC, GaN Power International's GPIHV15DK and GPIHV30DDP5L GaN power FETs

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GaN Power Transistors Target High-End Audio And SMPSs, Infineon Technologies' IGT40R070D1 E8220 and IGLD60R190D1 CoolGaN power transistors

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SiC FETs Lower On-Resistance To Less Than 10 mΩ, UnitedSiC's UF3SC SiC FETs

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February 2018:

Rad-Hard GaN Devices Propel Space Power Supplies To Higher Performance, Renesas Electronics' ISL7002xSEH GaN FETs and ISL70040SEH GaN FET driver

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March 2018:

1200-V SiC Schottky Diodes Target Urban Off-Board Chargers And Solar Inverters, Wolfspeed's C4D10120H, C4D15120H and C4D20120H 1200-V SiC Schottky diodes

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1200-V SiC MOSFETs Offer 120-mΩ or 160-mΩ On-Resistance, Littelfuse and Monolith Semiconductor's LSIC1MO120E0120 and LSIC1MO120E0160 SiC MOSFETs

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June 2018:

SiC Schottky Diodes Are Tailored For On-Board Chargers In Hybrids And EVs, Infineon Technologies' CoolSiC Schottky diode family

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650-V IGBTs Deliver High Efficiency With Soft Switching, ROHM's RGTV and RGW series 650-V IGBTs

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SiC JFET Cascodes Are High-Performance Upgrades For IGBTs And MOSFETs, UnitedSiC's UJ3C1200 series of 1200-V SiC JFET cascodes

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October 2018:

Half H-Bridge Module Combines SiC MOSFETs with Integrated Gate Drive, Apex Microtechnology's SA110 SiC half H-bridge module

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Smart Switch Supports Fuel Savings In Automotive Power Trains, Infineon Technology's TLE9104SH smart quad-channel powertrain switch

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November 2018:

600-V GaN FET Power Stages Boost Performance For Applications Up To 10 kW, Texas Instruments' LMG34x family of 600-V GaN power stages

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SiC FETs Offer Faster Switching With Cascode Convenience, UnitedSiC's UF3C FAST series 650-V and 1200-V SiC FETs

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Superjunction MOSFET Offers 900-V Breakdown Voltage And Low Total Gate Charge, MagnaChip Semiconductor's 90R1K4P superjunction MOSFET

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December 2018:

Isolated High-Side Power Switch Offers SPI And Many Other Features, STMicroelectronics' ISO8200AQ isolated octal high-side smart power switch

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February 2017:

Intelligent Power Modules Offer More Packages, More Features For Appliances, STMicroelectronics' SLLIMM nano series of Intelligent Power Modules for motor drives

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March 2017:

900-V MOSFETs Enhance Power And Efficiency Of Flyback Converters,
STMicroelectronics' MDmesh K5 superjunction MOSFETs

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May 2017:

GaN FETs Meet Hybrid, Electric Vehicle Needs, Transphorm's TPH3205WSBQ
650-V GaN FET

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100-V Power Stage Module Satisfies Cloud Infrastructure Requirements,
ON Semiconductor's FDMF8811 100-V bridge power stage module

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June 2017:

1200-V SiC Diodes Improve Performance Of Appliances, Vehicle Chargers,
STMicroelectronics' 1200-V SiC Schottky diodes

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Isolated IGBT Package Improves Thermal Performance, Reduces Assembly Time,
Infineon Technologies' TRENCHSTOP Advanced Isolation package

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August 2017:

150-A IGBT Modules Boost Power Density, Infineon Technologies' EconoPIM 3
IGBT modules

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October 2017:

P-Channel Zero-Threshold MOSFET Array Creates New Possibilities In Energy Harvesting,
Advanced Linear Devices' ALD310700A/ALD310700 quad zero-threshold MOSFET array

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November 2017:

GaN Eval Board Simplifies MegaHertz Power For Audio And Other Applications, GaN Systems' GS61004B-EVBDC evaluation board

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December 2017:

SJ MOSFETs Are Optimized For High-Power Soft-Switching Topologies, Infineon Technologies' CoolMOS CFD7 family of SJ MOSFETs

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April 2016:

650-V GaN FET Delivers Low On-Resistance In TO-247, Transphorm's TPH3207WS GaN FET

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Integrated Power Stages Raise Efficiency Of VR Solutions, Infineon Technologies' Integrated Power Stage family

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May 2016:

600-V GaN FET Power Stage Promises Performance Boost And Reliability, Texas Instruments' LMG3410 GaN FET power stage

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1200-V SiC MOSFETs Deliver Dramatic Improvements Versus Silicon IGBTs, Infineon's CoolSiC MOSFETs and modules

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Embedded Component Packaging Leads To Tiny GaN Transistors, AT&S's Embedded Component Technology

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June 2016:

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1200-V Full SiC Module Boasts More-Efficient High-Frequency Operation,
ROHM Semiconductor's BSM180D12P3C007 SiC power module

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Discrete And Bare Die IGBTs Target Hybrid And All-Electric Vehicles,
Fairchild Semiconductor's FGY160T65SPD_F085 and FGY120T65SPD_F085 discrete IGBTs, PCGA200T65NF8, PCRKA20065F8, PCGA300T65DF8, and PCRKA30065F8 bare die IGBTs and diodes, and an automotive-grade module

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All-SiC Half-Bridge Power Module Features Highly Optimized Package Design,
Wolfspeed's CAS325M12HM2 62-mm power module

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July 2016:

GaAs Switches + 3D Package Will Enable Small, Fast Voltage Regulators,
Sarda Technologies' HIPS heterogeneously integrated power stage.

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August 2016:

Solder-Bond, 50-mm Thyristor/Diode Modules Offer Lower Cost,
Infineon Technologies' 50-mm thyristor/diode modules

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1700-V SiC MOSFET Reduces Losses In Industrial Applications,
ROHM's SCT2H12NZ SiC MOSFET

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September 2016:

1350-V IGBT Is Optimized For Soft-Switching,
Alpha and Omega Semiconductor's AOK30B135W1 IGBT

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800-V Superjunction MOSFETs Improve Efficiency Of Flyback Converters,
Infineon Technologies' CoolMOS P7 series of superjunction MOSFETs

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October 2016:

800-V SCRs Deliver High Temp Operation In Surface-Mount Package,
STMicroelectronics' TM8050H-8 SCR

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1000-V SiC MOSFET Raises Power Density Of EV Battery Chargers,
Wolfspeed's C3M0065100K SiC MOSFET

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1200-V GaN Power Modules Deliver Efficient, High-Speed Switching, *VisIC Technologies' family of 1200-V GaN power modules*

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IGBT Modules Feature Sixpack Topology, Ratings Up To 200 A, *Vincotech's MiniSKiiP PACK 2 and MiniSKiiP PACK 3 1200-V IGBT modules*

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November 2016:

Comprehensive Platform Eases Evaluation Of GaN Transistors, *GaN Systems' daughterboard-style evaluation kit*

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January 2015:

4-mm x 5-mm Power Block Provides Another Option For Shrinking DC-DC Designs, *International Rectifier's IRFH4257D dual power MOSFET*

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Intelligent Power Modules Are Optimized For Embedded Motor Drives And Inverters , *Rohm Semiconductor's family of IPMs*

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February 2015:

1200-V SiC MOSFET Features <290-mΩ On-Resistance To 200°C,
STMicroelectronics' SCT20N120 SiC MOSFET

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March 2015:

GaN FETs + Driver Module Lowers Barriers To GaN-Based Power Design,
Texas Instruments' LMG5200 integrated half-bridge GaN FET power-stage

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SiC MOSFETs Miniaturize Ultra-High Voltage Pulse Generators, ROHM's
SCT2080KE SiC MOSFET

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April 2015:

Top Five Products And Demos Seen at APEC 2015

- Cree's SiC-Module-Based 50-kW String PV Inverter
- Fairchild's New Extended Temperature Mid-Voltage MOSFETs Rated at 175° C

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May 2015:

GaN Transistors Are Cheaper Than Silicon, Efficient Power Conversion's
EPC2035 and EPC2036 eGaN power transistors

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June 2015:

9.5-kV Light-Triggered Thyristor Integrates Forward Recovery Protection,
Infineon Technologies Bipolar's Light-triggered thyristor

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Enhancement-mode GaN transistor Boasts 60-A Rating, GaN Systems'
GS65516T 60-A 650-V GaN transistor

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July 2015:

900-V SiC MOSFET Outperforms Superjunction Silicon MOSFETs, Cree's
C3M0065090J SiC MOSFET

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IGBT Modules Are Configurable For A Wide Range Of Applications, Powerex
Integrated Power Modules (PIPMs)

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September 2015:

Power MOSFETs Feature Low Turn-Off Losses, STMicroelectronics' MDMesh M2
EP power MOSFETs

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November 2015:

Super-Junction Power MOSFETs Move Up To 1500 V, STMicroelectronics'
MDmesh K5 superjunction MOSFETs

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December 2015:

High-Temp SiC Power Modules Offer Different Configurations, Current
Ratings, CISSOID's CHT-PLUTO and CHT-EUROPA SiC power modules

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February 2014:

***Package Innovation Shrinks 650-V And 800-V MOSFETs Into 5- x 6-mm
Footprint***, STmicroelectronics' PowerFLAT 5x6 HV and VHV packages

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March 2014:

100-V eGaN FET Benefits Power Switching And RF Applications, Efficient
Power Conversion's EPC8010 power transistor

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April 2014:

Discrete Power Semis and Modules Article Archive

1200-V SiC Power MOSFET Boasts 200°C Rating, STMicroelectronics' SCT30N120 SiC MOSFET

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Driver Stage Tailors Power Conversion Solution To High-Performance FPGAs, Altera's ET4040 monolithic 40-A driver plus synchronous MOSFET powertrain

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600-V GaN Devices Are Offered In PQFNs Plus TO-220s For Low-Power Designs, Transphorm's TPH3002LD and TPH3002LS 600-V GaN HEMT devices in PQFNs and TPH3002PD and TPH3002PS 600-V GaN HEMT devices in TO-220s

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June 2014:

1200-V SiC MOSFET Lowers On-Resistance To 25-mΩ In TO-247, Cree's C2M0025120D SiC MOSFET

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July 2014:

25-A Phase-Control Stud-Style Thyristors Come In TO-48 Packages, America Semiconductor's 25RIA series phase-control thyristors

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October 2014:

All-SiC Half-bridge Module Reduces Cost And Size For Inverters, Cree's CAS300M17BM2 all-SiC 1.7-kV half-bridge power module

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Monolithic eGaN Half Bridge Boosts Efficiency For Buck Converters, Efficient Power Conversion's EPC2100 eGaN half bridge

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November 2014:

1200-V And 1700-V SiC Junction Transistors Are Positioned To Challenge SiC MOSFETs And Silicon IGBTs, GeneSiC Semiconductor's 1700-V SiC junction transistors (SJTs)—the GA50JT17-247 (25 mΩ), GA16JT17-247 (65 mΩ), and

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GA04JT17-247 (220 mΩ) —and 1200-V SJTs—the GA50JT12-247 (25 mΩ), GA20JT12-247 (60 mΩ), GA10JT12-247 (120 mΩ), and GA05JT12-247 (210 mΩ)
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December 2014:

Reverse-Conducting IGBTs Combine Strengths Of IGBTs And MOSFETs For High-Current Applications, IXYS's line of 3600-V reverse-conducting IGBTs
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January 2013:

Power MOSFETs Feature Ultra-Low On-State Resistance, International Rectifier's StrongIRFET family of 40-V HEXFET MOSFETs
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April 2013:

Smart Bypass Diode Lowers Power Dissipation, Texas Instruments' SM74611 smart bypass diode
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Development Board Facilitates Design of High-Frequency Converters Using GaN Transistors, Efficient Power Conversion's EPC9010 development board, for evaluation of EPC's 100-V eGaN FETs
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High-Voltage Silicon Diodes Achieve Ultrafast Recovery, Infineon Technologies' Rapid 1 and Rapid 2 650-V fast-recovery silicon diode families
[For more details...](#)

May 2013:

Fast-Switching Solid-State Relays Consume Ultra-Low Power, Electronic Design & Research's μ R2M and μ D2M series solid-state relays
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Precision N-Channel MOSFET Arrays Feature Zero Threshold Voltage, Advanced Linear Devices' ALD210800A/ALD210800 n-channel MOSFET arrays
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June 2013:

Intelligent Power Modules Reinforce Automotive Safety, Mitsubishi Electric's PM800CJG060G and PM500CJG120G J-series automotive IPMs

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August 2013:

GTO Thyristor Handles 500 A In Smaller Package, IXYS UK Westcode's S0500YC GTO thyristor

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October 2013:

Trench Technology Boosts Efficiency, New Package Saves Space For Rad-Hard MOSFETs, International Rectifier's R8 rad-hard trench MOSFETs

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Enhancement-Mode GaN FET Delivers Extremely Low On-Resistance, Efficient Power Conversion's EPC2018 eGaN FET

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November 2013:

High-Voltage Gate Driver Features Unique Monitoring Capabilities, Amantys' AP45CC1 IGBT gate driver

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January 2012:

Demo Suggests Cascode MOSFET Stacks up Well Against SiC And Si Switches, Alpha and Omega Semiconductor's and SemiSouth Laboratories' UniSiC 1200-V, 90-m Ω MOSFET

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Compound Power Devices Co-Package SiC Schottkys With MOSFETs Or IGBTs, Renesas Electronics' RJQ6020DPM, RJQ6021DPM, and RJQ6022DPM SiC compound power devices

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600-V SiC Schottky Targets Air Conditioners, Base Stations, And Solar Arrays, Renesas Electronics' RJS6005TDPP SiC Schottky barrier diode

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February 2012:

Power Device Enhances Scalability In Computing And Consumer Applications, International Rectifier's IR3551 50-A PowIRstage module

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April 2012:

Soft-Switching IGBT Replaces Relays In PTC Heaters For Hybrid And Electric Vehicles, International Rectifier's AUIRGDC0250 1200-V automotive-qualified IGBT for soft-switching applications

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May 2012:

50-A Power Devices Extend SiC Benefits To More Applications, Cree's family of 50-A SiC MOSFETs and Schottkys

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Power Modules Shrink Footprint For Appliances And Industrial Applications, International Rectifier's family of μ IPM power modules

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650-V 55-m Ω SiC JFETs Boast Extremely Low On-Resistance, SemiSouth Laboratories' SJDA065R055 SiC JFET power transistors

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July 2012:

MOSFET Delivers Low On-Resistance At 650 V, STMicroelectronics' STY139N65M5 650-V n-channel superjunction MOSFET

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September 2012:

High-Voltage GaN HEMT Achieves JEDEC Qualification, Transphorm's TPH2006PS 600-V GaN HEMT

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Super Junction MOSFETs Break New Ground At 900 V And 950 V, STMicroelectronics' SuperMESH 5 super junction MOSFETs

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October 2012:

Development Boards Simplify Evaluation Of eGAN FETs, Efficient Power Conversion's EPC9003 and EPC9006 development boards

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High-Speed 600-V IGBTs Feature Very Low Saturation Voltage, Advanced Power Electronics Corp.'s AP20GT60 n-channel IGBT family

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November 2012:

Robust High-Voltage MOSFETs Challenge Superjunction MOSFETs, Alpha and Omega Semiconductor's AlphaMOS II MOSFETs

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December 2012:

High-Voltage IGBT Modules Handle 4160-V AC Lines, Powerex's QID3320002 and QID4515002 dual HVIGBT modules

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January 2011:

1200-V Silicon Carbide MOSFET Aims To Replace Silicon Devices, Cree's CMF20120D 1200-V SiC power MOSFET

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New Package Shrinks MOSFETs for Hi-Rel Space Applications, International Rectifier's family of hermetic rad-hard 100-V MOSFETs in the new SMD0.2 package
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SiC Schottkys Support Power Supply Designs for More-Efficient Data Centers, Cree's Z-Rec 650-V SiC Schottky diodes
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February 2011:

MOSFETs Boost DC-DC Converter Efficiency Up To 2%, International Rectifier's DirectFETplus 25-V power MOSFETs
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MOSFET Boasts Micro-ohm On-resistance, Picor's PI5101 MOSFET
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Surface-Mount SiC Schottky Targets Solar Micro-inverters, Cree's C2D05120 1200-V SiC Schottky diode
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SiC JFETs Are Now Shipping in Commercial Quantities, SemiSouth Laboratories' SJEP120R100, SJEP120R063 and SJEP170R550 normally-off trench SiC power JFETs
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March 2011:

GaN Semiconductor Startup Demos 99% Efficient DC-DC Boost Converter, Transphorm's EZ-GaN technology
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Second-Gen GaN Transistors Feature Enhanced Performance, Lead-Free Packaging, Efficient Power Conversion's EPC2001 and EPC2015 enhancement-mode GaN-on-silicon FETs
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60-A Module Boasts Better Performance Than DrMOS and Other Power Devices, International Rectifier's IR3550 PowIRstage
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High-Voltage Superjunction MOSFET Enables High-Efficiency AC-DC Conversion, Alpha and Omega Semiconductor's AOTF27S60 600-V superjunction MOSFET

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CanPAK Family Adds Medium-Voltage MOSFETs, Infineon Technologies's 60-V to 150-V OptiMOS power MOSFETs

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May 2011:

High-Voltage Power Switch Features 225°C Operation, Logic-level Gate Control, Cissoid's CHT-Jupiter 600-V SiC power switch with logic-level gate drive

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Shielded Gate Lowers Losses For 60-V Trench FET, Fairchild Semiconductor's FDMS86500L N-channel, PowerTrench MOSFET

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Lower Current Rating And Price Extends SiC MOSFET Benefits To More Apps, Cree's CMF10120 24-A 1200-V SiC MOSFET

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600-V Fast IGBTs Reduce Inverter Size And Cost, Infineon Technologies IKD03N60RF and IKD04N60RF reverse-conducting IGBTs

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June 2011:

Power Module Targets Hybrid And Electric Vehicles, Mitsubishi Electric's CT300DJH060 J-Series transfer molded power module

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August 2011:

High-Temperature Components For Power Design

- **40-V GaN Transistor Is Fully Enhanced at Lower Gate Voltage**, Efficient Power Conversion's EPC2014 eGaN FET

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- *New Source For Space-Grade Power MOSFETs, STMicroelectronics' STRH100N10, STRH8N10, STRH40P10, STRH100N6 and STRH40N6 rad-hard power MOSFETs*
- *SiC JFETs Target High-end Audio, SemiSouth Laboratories SJEP120R100A and SJEP120R063A SiC JFETs*
- *Automotive-qualified MOSFETs Deliver Low $R_{DS(ON)}$ For Heavy Loads, International Rectifier's AUIRF1404 and other 40-V to 75-V MOSFETs*
- *1200-V SiC Schottkys Offer Higher Performance At Lower Cost, Cree's C4D02120x, C4D05120x, C4D10120x, C4D20120x and C4D40120x 1200-V Z-Rec SiC Schottky diodes*
- *Small-Signal Diode Operates To 225°C, CISSOID's CHT-GANYMEDE dual small-signal diode*

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September 2011:

Power MOSFETs , IGBTs, And Modules

- *Ultra-fast 1200-V IGBTs Target Induction Heating, International Rectifier's IRG7PH35UD1 and IRG7PH42UD1 trench IGBTs*
- *Ultra-fast 1200-V IGBTs Reduce Switching And Conduction Losses, International Rectifier's IRG7PH35xx, IRG7PH42xx, IRG7PH46xx, IRG7PH50x field-stop trench IGBTs*
- *1200-V IGBTs Feature High Gain, High Speed, IXYS's IXYH50N120C3, IXYH82N120C3, IXYN82N120C3H1, and IXYB82N120C3H1 IGBTs*
- *1200-V SiC JFET Power Module Is Offered As Standard Product, Microsemi's APTJC120AM13VCT1AG phase-leg SiC power module*
- *1200-V SiC JFET Delivers Low On-Resistance, SemiSouth Laboratories' SJDP120R045 and SJDC120R045 normally on trench SiC power JFETs*
- *Power Modules Strengthen Safety, Increase Functionality For Electric Vehicles, Mitsubishi Electric's J-series new intelligent power modules (IPMs) and J-series transfer-molded power modules (T-PMs), models PM150CJG120G, PM300CJG060G, PM300CJG120G, PM600CJG060G, CT300DJH120, and CT600DJH060*
- *650-V MOSFETs Integrate Fast Body Diode For Higher Efficiency, Infineon Technologies' CFD2 650-V CoolMOS MOSFETs, model IPW65R080CFD*
- *Power Modules Are Tailored To All Major Solar Converter Topologies, Microsemi's power modules, models APTC60AM45BC1G, APTC60AM45B1G, APTC60AM83BC1G, APTC60AM83B1G, APTCV60HM45RCT3G, APTCV60HM45RT3G, APTCV60HM70RT3G, APTC60HM70RT3G, APTGT50H60RT3G, APTCV60HM45BC20T3G, APTCV60HM45BT3G,*

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*APTCV60HM70BT3G, APTGV50H60BT3G, APT5M65BBM19T3G,
APTC60BBM24T3G, and APTGT100BB60T3G*

- *40-V To 600-V MOSFETs Are Optimized For Solar Microinverters, Alpha and Omega Semiconductor's AlphaMOS MOSFETs, models AOT240L, AOT260L, AOT290L, AOTF42S60, AOD11S60, and AOTF12N60FD*
- *Second-Gen 200-V GaN Transistor Delivers Enhanced Performance, Efficient Power Conversion's EPC2010 eGaN FET*
- *Trench MOSFETs Boost Efficiency In Synchronous Rectification Applications, Fairchild Semiconductor's FDP083N15A_F102, FDB082N15A and FDP036N10A 100-V and 150-V PowerTrench MOSFETs*
- *Development Board Eases Designs Based On 100-V GaN FETs, Efficient Power Conversion's EPC9006 development board for EPC2007 100-V eGaN FET*
- *Increased Voltage Ratings Extend MOSFET Benefits To More DC-DC Applications, STMicroelectronics' 60-V, 75-V, and 80-V STripFET VI DeepGATE power MOSFETs, models STP260N6F6, STH260N6F6-2, STP210N75F6, STH210N75F6-2, and STL75N8LF6*
- *P-Channel MOSFETs Improve Efficiency And Cut Costs In Automotive Designs, Infineon Technologies' OptiMOS P2 40-V family of trench power MOSFETs, 30 models including the IPD90P04P4-05*
- *Power MOSFETs For Automotive Reduce On-Resistance, STMicroelectronics' 30-V and 40-V STripFET VI DeepGATE power MOSFETs, 9 models*
- *Dual Asymmetric MOSFET Modules Push Power Density Higher, Fairchild Semiconductor's FDMS36xxS power-stage MOSFET modules*

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October 2011:

Diodes And Rectifiers

- *SiC Schottkys In DPAKs Offer 2-A To 10-A Ratings, Cree's C4D02120E, C4D05120E, C4D08120E, and C4D10120E 1200-V SiC Schottky diodes*
- *1200-V/5-A SiC Diodes Come In DPAK Packaging, SemiSouth Laboratories' SDB05S120 SiC diodes*
- *200-V Schottky Achieves Over 2-kV ESD Protection, STMicroelectronics STPS60SM200C 200-V Schottky diode*
- *Low-VF Schottkys Come In Space-Saving Package, Central Semiconductor's CTLSH01-30 and CTLSH01-30L low-V_F Schottky diodes*
- *600-V Rectifiers Deliver Over 10 A In DPAK Package, Vishay Intertechnology's 200-V and 600-V FRED Pt Hyperfast and Ultrafast rectifiers, 18 models including models VS-12EWH06FNx-M3, VS-15AWL06FNx-M3, VS-15EWL06FNx-M3, VS-15EWH06FNx-M3, and VS-15EWX06FNx-M3*

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IGBTs Deliver Power Savings, Higher-Temperature Operation, Powerex's S-series 300-A to 800-A, 1200-V IGBTs, models CM300DY-24S, CM450DY-24S, CM600DY-24S, and CM800DY-24S

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Gate-Driver Evaluation Board For SiC Power Modules, SemiSouth Laboratories' SGDR2500P2 optoisolated gate-driver board

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Gate Drive Enhances Performance, Design Reuse In Medium- And High-Voltage Applications, Amantys Power Drive for 3.3-kV IGBT modules

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IGBT Integrates Freewheeling Diode For Small Size In Induction Heating, Toshiba Electronics Europe's GT40QR21 1200-V IGBT

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Half-Bridge Power Modules Feature Small Footprint, Vincotech's flowPHASE 0 2nd Generation family of half-bridge power modules

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MOSFETs Take Top-Side Cooling A Step Further, CSD16407Q5C, CSD16408Q5C, CSD16325Q5C, CSD16321Q5C, and CSD16322Q5C DualCool NexFET MOSFETs from Texas Instruments

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DirectFETs Are Qualified for Automotive, International Rectifier's AUIRF7739L2 and AUIRF7665S2 AEC-Q101 qualified DirectFET2 power MOSFETs

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MOSFETs Boast Lower FOM at 200 V and 250 V, Infineon Technologies' OptiMOS power MOSFETs

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GaN Power Transistors Seek To Replace Silicon Power MOSFETs, Efficient Power Conversion's enhancement-mode GaN-on-silicon power transistors, models EPC1014, EPC1015, EPC1009, EPC1005, EPC1007, EPC1001, EPC1013, EPC1011, EPC1012, and EPC1010

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GaN-Based Power Stages Look To Reshape Point-of-Load Landscape, International Rectifier's iP2010 and iP2011 GaN-based power stage devices

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SiC Schottkys Push Voltage Ratings to 1700 V, Cree's CPW3-1700S010B and CPW3-1700S025B Z-Rec 1700-V junction barrier Schottky diodes

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Automotive MOSFETs Promise Low $R_{DS(ON)}$ and Durability, International Rectifier's family of automotive-qualified MOSFETs, 22 models including AUIRF1324, AUIRF2804, AUIRF1404Z, AUIRF4104, AUIRF1010Z, and AUIRF3710Z

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Modules Optimize Cost-Performance Ratio For Appliance Motor Drives, STMicroelectronics' STGIPS10K60A, STGIPS14K60, STGIPL14K60, and STGIPS20K60 Intelligent power modules (IPMs)

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Power Block Boosts Efficiency, Saves Space Versus Discrete MOSFETs,
Texas Instruments' CSD86350Q5D Power Block

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Semiconductor's AOZ5006 6-mm x 6-mm DrMOS power module

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150-V MOSFET Enhances Performance Of Isolated DC-DC Converters,
Fairchild Semiconductor's FDMS86200 150-V trench power MOSFET

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1200-V SiC Schottky Family Features 30-A Device In TO-247, SemiSouth
Laboratories' family of 1200-V SiC power Schottky diodes

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MOSFETs Minimize Gate Charge For Industrial Applications, IR's 150-V and
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MOSFET Reduces On-Resistance in Tiny CSP, Fairchild Semiconductor's
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Intelligent Power Module Sets New Mark for Power Delivery, Powerex's DIP-IPM family including models PS21A7A ,PS21A79, and PS22A72 to PS22A78-E

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600-V Silicon Rectifiers Approach SiC Performance, QSpeed's H-series 600-V silicon rectifiers including models QH03TZ600, QH05TZ600, QH08TZ600, and QH12TZ600

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