



Vishay Intertechnology, Inc.

Industrial

(Factory Automation)



One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components





Industrial

Factory Automation

Motor Drives

2

Testers

3

Control Units

4

More information on the Engineer's Toolbox, including product datasheet links, can be found at www.vishay.com/ref/et3.

For inquiries, please contact your local sales representative.

Key components for FACTORY AUTOMATION



THE VISHAY ADVANTAGE

- Long Useful Life
- Safety Approvals
- Robust Design
- High Peak Pulse Power
- High Precision and Stability
- High Surge Current Capabilities
- and more....

Motor Drives



Testers



Control Units





Motor Drives



ICs

Low Power Consumption Current Mode Controller



[SiP2802DY](#)

- Pin-for-pin compatible with UCC280X, enhanced performance UC284X
- Advanced architecture
- Enables complete offline and DC/DC designs with few components

RESISTORS

Power Resistor for Mounting onto a Heatsink Thick Film Technology



[LPS 800](#)

- High power, 57 mm x 57 mm, 800 W at 25 °C on heatsink, low weight of 83 g
- Non-inductive down to 1 μ H, high pulse capability up to 1000 J short pulse

RECTIFIERS

High-Voltage Ultrafast Rectifiers



[UGx15xT Series](#)

- Soft recovery characteristics
- AEC-Q101 qualified

ESTA POWER CAPACITORS

Capacitors for Power Electronic (PEC) – Cylindrical



[EMKP](#)

- High RMS current rating
- Internal safety device

INDUCTORS

Filter Inductors, High-Current, Radial Leaded



[IHB1](#)

- Conventional high-current vertical bobbin inductor
- Low cost, high-current

MOSFETs

N-Channel 60 V (D-S) 175 °C MOSFET



[SUM110N06-3M4L](#)

- Classic TrenchFET® technology, maximum $R_{DS(on)}$ 3.4 m Ω
- Popular D²PAK packaging

TANTALUM CAPACITORS

Solid Tantalum Surface-Mount Chip Capacitors, TANTAMOUNT®, Molded Case



[293D](#)

- Molded tantalum capacitor, standard industrial grade
- General purpose capacitor

INDUCTORS

Low-Profile, High-Current IHLP® Inductors



[IHLP-2525CZER100M01](#)

- Compact composite inductor for high-efficiency DC/DC conversion

RECTIFIERS

Single-Phase Single In-Line Bridge Rectifiers

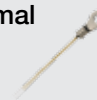


[GSIB2560](#)

- UL recognition file number E54214
- Solder dip 275 °C maximum 10 s, per JESD 22-B106

NON-LINEAR RESISTORS

NTC Thermistors, Low Thermal Gradient Lug Sensors



[NTCALUG02...](#)

- Low thermal gradient surface temperature sensor
- High insulation voltage

MOSFETs

E Series 600 V Power MOSFET



[SiHD7N60E](#)

- High performance E Series high-voltage technology, maximum $R_{DS(on)}$ 600 m Ω
- Popular DPAK packaging, maximum continuous current of 7 A

RESISTORS

Power Metal Strip® Resistors, Low Value (Down to 0.0005 Ω), Surface-Mount



[WSL](#)

- Extremely low resistance values from 0.0005 Ω to 0.5 Ω and tolerance of 1 %
- Power Metal Strip all-welded construction offers high pulse capacity

View datasheets for these products
www.vishay.com/ref/et3in1a



Testers



OPTOELECTRONICS

High-Speed, SPST Normally Open (1 Form A) Solid-State Relay in DIP-6 Package[VO14641AT](#)

- Isolation test voltage of 5300 V_{RMS}, load voltage of 60 V, DC load current of 2 A
- Can be configured for AC/DC or DC only operation with clean, bounce-free switching

DIODES

Surface-Mount TRANSZORB® Transient Voltage Suppressors[SMCJxx](#)

- Available in unidirectional and bidirectional
- AEC-Q101 qualified

RESISTORS

Professional Thin Film Chip Resistors[MCT0603-AT](#)

- Best in class surge handling capability, excellent overall stability class 0.5
- CECC approved acc. EN 140401-801, sulfur resistant

MOSFETs

P-Channel 40 V (D-S) MOSFET[Si2319CDS](#)

- Classic TrenchFET® technology, maximum R_{DS(on)} 77 mΩ
- Popular SOT-23 packaging

CERAMIC CAPACITORS

AC Line Rated Disc Capacitors, Class X1, 760 V_{AC}, Class Y1, 500 V_{AC}[VY1](#)

- X1 / Y1 safety rating according to IEC 60384-14, 3rd edition
- Highest reliability and lifetime, operating temperature: -40 °C to +125 °C

ICs

Precision 8-Channel / Dual 4-Channel CMOS Analog Multiplexers[DG508B](#)

- High-precision, low-noise signal switching, 2 pC low charge injection
- Low parasitic capacitance of 18 pF C_{D(on)}, low leakage typically of 3 pA

RESISTORS

Power Resistor for Mounting onto a Heatsink, Thick Film Technology[LPS 600](#)

- High-power, 57 mm x 57 mm, 600 W at 25 °C on heatsink, low weight of 83 g
- Non-inductive down to 1 μH, high pulse capability up to 1000 J short pulse

RECTIFIERS

Hyperfast Rectifier, 15 A FRED Pt®[VS-15ETH06FPPbF](#)

- 175 °C operating junction temperature
- Hyperfast recovery time

INDUCTORS

Wirewound, Surface-Mount Molded Inductors[IMC-1210](#)

- RF Inductor for high density filter applications
- Vertical bobbin construction eliminates cross talk with nearby components

TANTALUM CAPACITORS

Solid Tantalum Surface-Mount Chip Capacitors, TANTAMOUNT®, Molded Case, Low ESR[TR3](#)

- Molded tantalum capacitor, low ESR
- Automation and control, SMPS, motion and drives, telecom infrastructure, networking and multiplexer, general purpose

RESISTORS

Molded, 50 mil Pitch, Dual-In-Line Thin Film Resistor, Surface-Mount Network[ORN](#)

- Multiple divider ratios with resistance values from 33 Ω to 500 kΩ per resistor
- Available in 0.05 % ratio tolerance and 5 ppm/°C TCR tracking

OPTOELECTRONICS

AC and DC Linear Optocoupler with VDE, UL, BSI, FIMKO Certification[IL300](#)

- Feedback photodiode compensates for LED's time and temperature characteristics
- Isolation test voltage, 5300 V_{RMS} in a DIP or SMD package

View datasheets for these products
www.vishay.com/ref/et3in1b



Control Units



MOSFETs

P-Channel 20 V (D-S) MOSFET[Si7615ADN](#)

- Industry leading p-channel Gen III technology, maximum $R_{DS(on)}$ 4.4 m Ω
- Thermally enhanced PowerPAK® 1212-8 is 1/3 the size of an SO-8

INDUCTORS

Low-Profile, High-Current IHLP® Inductors[IHLP-2525](#)

- Compact size, high-current DC/DC conversion and filtering

MODULES

Ultrafast Diode 300 A, 600 V in IAP Package H/B Configuration[VSKT162/12PbF](#)

- UL approved file E78996
- High surge capability

RESISTORS

High-Precision Wraparound – Thin Film Chip Resistors, Sizes 0302 to 2512[P Series \(5 ppm/°C\)](#)

- Low TCR down to 5 ppm/°C (-55 °C to +155 °C), tight tolerance down to 0.01 %
- Sulfur resistant, failure rate E7 level, from 10R up to 200M

ICs

8-Channel, Dual 4-Channel, Triple 2-Channel Multiplexers[DG9451](#)

- High-precision, low-noise signal switching, < 0.5 pC low charge injection
- Low parasitic capacitance of 16 pF $C_{D(on)}$, low leakage typically of 3 pA

TANTALUM CAPACITORS

Solid Tantalum Surface-Mount Chip Capacitors TANTAMOUNT®, Molded Case, HI-TMP®[TH4](#)

- Temperature molded tantalum capacitor HI-TMP – 175 °C
- Harsh environment, high temperature sensors, decoupling, filtering

MOSFETs

N-Channel 1000 V Power MOSFET[IRFBG20](#)

- Rugged planar technology, maximum $R_{DS(on)}$ 11 Ω
- Popular TO-220 packaging, maximum continuous current of 1.4 A

FILM CAPACITORS

Interference Suppression Film Capacitor – Class Y2, Radial MKP 300 V_{AC}[MKP338 6](#)

- RFI Y2 capacitor for bypass applications

RESISTORS

Metal Film Resistors, High-Precision, High-Stability[PTF](#)

- Tolerances to ± 0.01 %
- TCR down to 5 ppm/°C, in temperature range of -20 °C to +85 °C

DIODES

4-Line Bus-Port ESD Protection, Flow-Through Design[VBUS054CD-FHI](#)

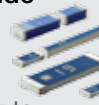
- Compact LLP2513-11L package
- Low leakage current I_R : < 0.1 μ A, low load capacitance C_D = 0.8 pF

OPTOELECTRONICS

Optically Isolated 1 Form A Solid-State Relay in a Surface-Mount 4-Pin SOP Package[VO1400AEFTR](#)

- Clean bounce free switching with max. R_{ON} of 5 Ω , and load voltage of 60 V
- Load current, AC peak of 100 mA, isolation test voltage 1500 V_{RMS}

CERAMIC CAPACITORS

Standard Reflow Process Assembly, High-Reliability Ceramic-Oxide Body Construction[Ceramic Chip Antenna](#)

- Frequency range from 400 MHz to 5 GHz
- Wide operating temperature range: -40 °C to +85 °C

View datasheets for these products
www.vishay.com/ref/et3in1c





Vishay Intertechnology, Inc.



A *WORLD OF*
SOLUTIONS