



Vishay Intertechnology, Inc.

Computer

(Portable Computers)



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





Computer

Portable Computers

Tablet PCs
Ultrabooks
Notebooks

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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 PORTABLE COMPUTERS



Tablet PCs



Ultrabooks



Notebooks



THE VISHAY ADVANTAGE

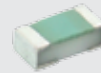
- Power Efficiency
- Optimized Performance
- Small Size
- Low Profile and Compact Size
- High Power Rating
- ESD Protection
- High Surge Current Capabilities
- Cost Efficiency

Tablet PCs



RESISTORS

Professional Thin Film Chip Resistors



[MCS0402...e3](#)

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

MOSFETs

P-Channel 20 V (D-S) MOSFET



[Si7655ADN](#)

- Industry leading p-channel Gen III technology, maximum $R_{DS(on)}$ 3.6 m Ω
- Thermally enhanced PowerPAK[®] 1212-8 is 1/3 the size of an SO-8

INDUCTORS

Low-Profile, High-Current IHLP[®] Inductors



[IHLP-1616AB](#)

- Very low profile, high-current inductor for DC/DC conversion
- High frequency energy storage up to 5 MHz

OPTOELECTRONICS

Fully Integrated Proximity and Ambient Light Sensor with I²C Interface



[VCNL4020](#)

- Infrared emitter is included in the 4.9 mm x 2.4 mm x 0.83 mm SMD pkg.
- 16-bit resolution, proximity range of up to 20 cm with programmable thresholds

RESISTORS

Power Metal Strip[®] SMD Resistors, Very High Power (to 3 W), Low Value (to 0.0005 Ω)

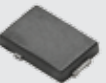


[WSLP](#)

- Very high power rating to 3 W in WSLP0603 to WSLP2512 size packages
- Extremely low resistance values from 0.0005 Ω to 0.1 Ω and tolerance of 1 %

RECTIFIERS

High Current Density Surface-Mount Trench MOS Barrier Schottky Rectifier



[V10PL45](#)

- Trench MOS Schottky technology
- Very low profile – typical height of 1.1 mm

NON-LINEAR RESISTORS

SMD 0402, Glass Protected NTC Thermistors



[NTCS0402E3](#)

- Glass protected with soft terminations
- Standard series, AEC-Q200 compliant

ICs

1.1 V to 5.5 V, Slew Rate Controlled Load Switch in TDFN4



[SiP32408](#)

- Low and flat R_{ON} over the full operation voltage range of 1.1 V to 5.5 V
- Features 2.5 ms rise time, true reverse blocking, low-voltage logic control

TANTALUM CAPACITORS

Solid Tantalum Chip Capacitors 298D MICROTAN[®], 298W Extended Range MICROTAN



[298D](#)

- High capacitance in small case sizes including 0603 and 0402 footprint
- Perfect for space constrained designs

DIODES

4-Line Bus-Port ESD Protection



[VBUS54ED-FBL](#)

- Ultra compact LLP2510-10L package
- Low load capacitance $C_D = 0.8$ pF

RESISTORS

Thick Film Surface-Mount Chip Resistors, Wraparound, Extremely Low Value



[RCWE](#)

- Low resistance values from 0.01 Ω to 0.99 Ω and tolerance of 1 %
- Thick film construction with 2x power capacity

RECTIFIERS

Surface-Mount Schottky Barrier Rectifiers



[MSS2P3](#)

- Very low profile – typical height of 0.65 mm
- AEC-Q101 qualified

View datasheets for these products
www.vishay.com/ref/et3co1a




Ultrabooks



MOSFETs

N-Channel 30 V (D-S) MOSFET




[SiS412DN](#)

- TrenchFET® Gen III technology, maximum $R_{DS(on)}$ 24 m Ω
- Thermally enhanced PowerPAK® 1212-8 is 1/3 the size of an SO-8

INDUCTORS

Low-Profile, High-Current IHLP® Inductors




[IHLP-2020AB](#)

- Very low profile, high current inductor for DC/DC conversion
- High frequency energy storage up to 5 MHz

MOSFETs

Dual N-Channel 30 V (D-S) MOSFET



[SiZ342DT](#)

- TrenchFET Gen IV technology for increased power density, maximum $R_{DS(on)}$ 11.1 m Ω
- PowerPAIR® packaging optimizes high and low side MOSFETs to increase efficiency

TANTALUM CAPACITORS

vPolyTan™ Polymer Tantalum Capacitors



[T55](#)

- High-capacitance, ultra low-ESR polymer tantalum capacitors
- Small case size, low profile

RESISTORS

Professional Thin Film Chip Resistors




[MCT0603...e3](#)

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

OPTOELECTRONICS

Ambient Light Sensor with High-Speed and High-Sensitivity PIN Photodiode Output



[TEMD6200FX01](#)

- Wavelength of peak sensitivity of 550 nm; similar to human eye sensitivity
- Excellent linearity over operating temperature range of -40 °C to +100 °C

RESISTORS

Power Metal Strip® Resistors, Low Value (Down to 0.0005 Ω), Surface-Mount, 4-Terminal




[WSK](#)

- Extremely low resistance values from 0.0005 Ω to 0.005 Ω and tolerance of 1 %
- 4-terminal, Power Metal Strip construction offers high current sensing accuracy

RECTIFIERS

High Current Density Surface-Mount Schottky Barrier Rectifiers




[SS3P3L, SS3P4L](#)

- Very low profile – typical height of 1.1 mm
- AEC-Q101 qualified

RECTIFIERS

High Current Density Surface-Mount Trench MOS Barrier Schottky Rectifier




[V12P12](#)

- Trench MOS Schottky technology
- Very low profile – typical height of 1.1 mm

NON-LINEAR RESISTORS

SMD 0402, Glass Protected NTC Thermistors




[NTCS0402](#)

- Glass protected with soft terminations
- Standard series, AEC-Q200 compliant

DIODES

Surface-Mount TRANSZORB® Transient Voltage Suppressors




[SMAJxx \(Power\)](#)

- 400 W peak pulse power capability with a 10/1000 μ s waveform
- AEC-Q101 qualified

MOSFETs

N-Channel 30 V (D-S) MOSFET



[SiSA18ADN](#)

- TrenchFET Gen IV technology for increased power density, maximum $R_{DS(on)}$ 7.5 m Ω
- Thermally enhanced PowerPAK 1212-8 is 1/3 the size of an SO-8

View datasheets for these products www.vishay.com/ref/et3co1b



Notebooks



OPTOELECTRONICS

Fully Integrated Proximity and Ambient Light Sensor with I²C Interface



[VCNL4010](#)

- Infrared emitter is included in the 3.95 mm x 3.95 mm x 0.75 mm SMD pkg.
- 16-bit resolution, proximity range of up to 20 cm with programmable thresholds

TANTALUM CAPACITORS

Solid Tantalum Surface-Mount Chip Capacitors, TANTAMOUNT[®], Molded Case, Built-In-Fuse



[TF3](#)

- Molded case, miniature built-in-fuse, low ESR, 100 % surge tested current
- Safety critical industrial, medical instrumentation, high end computing, data storage

RECTIFIERS

Dual High-Voltage Trench MOS Barrier Schottky Rectifier



[V20120C](#)

- Trench MOS Schottky technology
- AEC-Q101 qualified

RESISTORS

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



[WSLx](#)

- 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

MOSFETs

N-Channel 30 V (D-S) MOSFET



[SiR172ADP](#)

- High density TrenchFET[®] technology, maximum R_{DS(on)} 8.5 mΩ
- Thermally enhanced PowerPAK[®] SO-8 packaging

INDUCTORS

Low-Profile, High-Current IHLP[®] Inductors

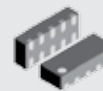


[IHLP-2525](#)

- Compact power inductor for high current DC/DC conversion
- High-frequency energy storage up to 5 MHz

DIODES

4-Line Bus-Port ESD Protection



[VBUS54ED-FBL](#)

- Ultra compact LLP2510-10L package
- Low load capacitance C_D = 0.8 pF

NON-LINEAR RESISTORS

SMD 0603, Glass Protected NTC Thermistors



[NTCS0603](#)

- Glass protected with soft terminations
- Standard series, AEC-Q200 compliant

OPTOELECTRONICS

IR Receiver Modules for Remote Control Systems



[TSOP57](#)

- Industry leading range of 45 m, directivity of ± 75° in a leadless SMD package
- Low profile of 0.8 mm and featuring AGC-3 or AGC-4 noise suppression

ICs

46 mΩ, Slew Rate Controlled Load Switch in uDFN4 1.1 mm x 1.1 mm



[SiP32472](#)

- 1.2 V to 5.5 V operation voltage range with low and flat R_{DS(on)}
- Featuring low I_{O2} output discharge, and reverse blocking

MOSFETs

N-Channel 30 V (D-S) MOSFET



[SiRA04DP](#)

- TrenchFET Gen IV synchronous buck low-side MOSFET with maximum R_{DS(on)} = 2.15 mΩ
- Thermally enhanced PowerPAK SO-8 packaging

RESISTORS

Thick Film Surface-Mount Chip Resistors, Wraparound, Extremely Low Value



[RCWE](#)

- Low resistance values from 0.01 Ω to 0.99 Ω and tolerance of 1 %
- Thick film construction with 2x power capacity

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www.vishay.com/ref/et3co1c





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A *WORLD OF*
SOLUTIONS