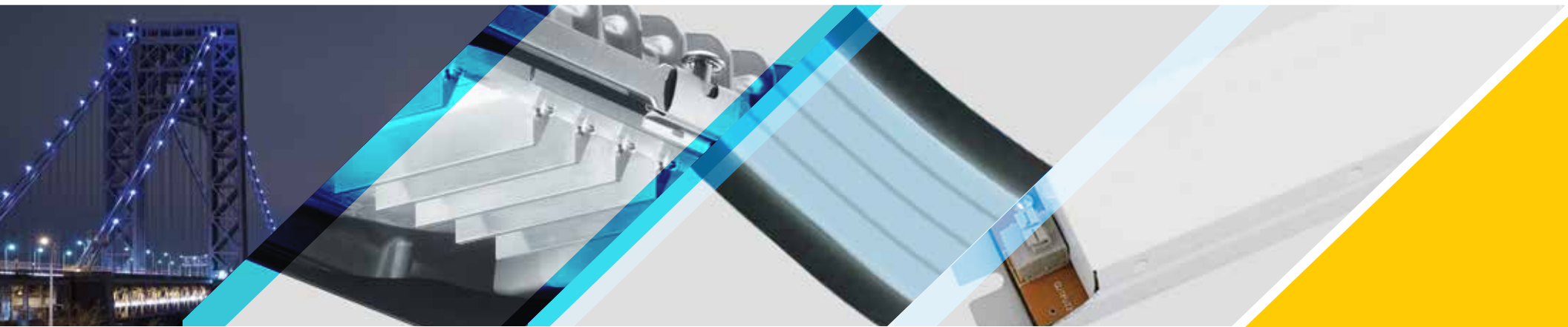




Vishay Intertechnology, Inc.

Consumer

(Lighting)



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





Consumer

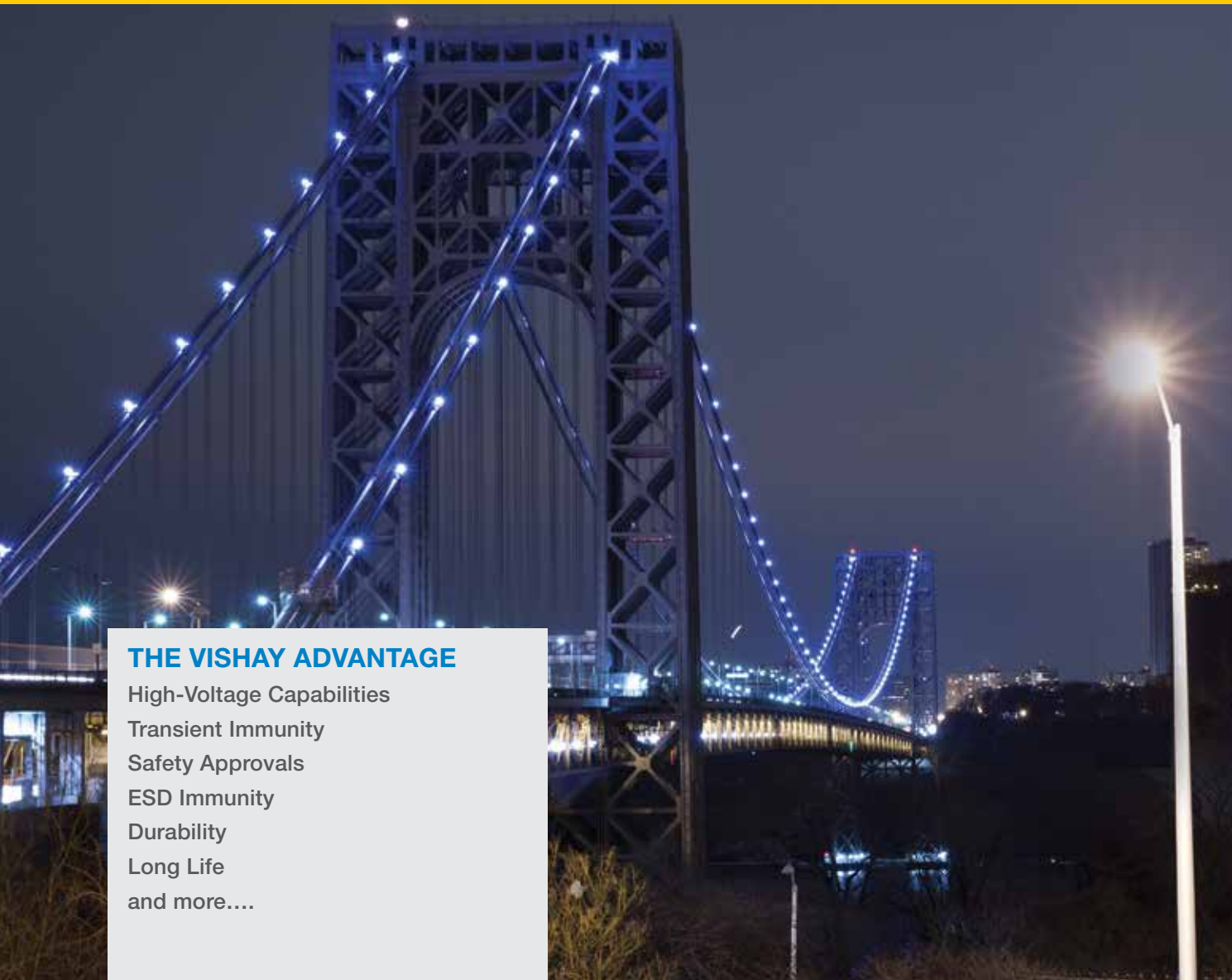
Lighting

| | |
|------------------------------------|---|
| LED SSD Lighting | 2 |
| OLED Displays for Illumination | 3 |
| Conventional Lighting Control Gear | 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
LIGHTING

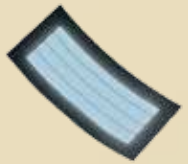


THE VISHAY ADVANTAGE
High-Voltage Capabilities
Transient Immunity
Safety Approvals
ESD Immunity
Durability
Long Life
and more....

**LED SSD
Lighting**



**OLED Displays
for Illumination**



**Conventional
Lighting Control
Gear**



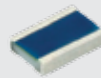


LED SSD Lighting



RESISTORS

Low-Ohmic Wide Terminal Thin Film Chip Resistors



[NCW 0406 AT](#)

- Power handling up to 300 mW, extreme thermocycling robustness up to 3000 cycles
- Available from 0.33 Ω to 0.91 Ω with TCR of 50 ppm/K and 1 % tolerance

MOSFETs

N-Channel 60 V (D-S) Fast Switching MOSFET



[Si7460DP](#)

- Classic TrenchFET[®] technology, maximum $R_{DS(on)}$ 9.6 m Ω
- Thermally enhanced PowerPAK[®] SO-8 packaging

RECTIFIERS

Surface-Mount Trench MOS Barrier Schottky Rectifier



[VSSB420S](#)

- Trench MOS Schottky technology
- Low power losses, high efficiency

MOSFETs

E Series 600 V N-Channel 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

DIODES

Zener Diodes with Surge Current Specification



[BZD27CxxP](#)

- AEC-Q101 qualified
- Zener and surge current specification

OPTOELECTRONICS

High-Brightness LED Power Module



[VLPC1201A2J](#)

- 240 mm x 14 mm metal core based LED power modules assembled with 12 white LEDs
- Luminous flux of 2100 lm, color temperature range from 5000 K to 7000 K

NON-LINEAR RESISTORS

SMD 0603, Glass Protected NTC Thermistors



[NTCS0603E3](#)

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

OPTOELECTRONICS

Optocoupler, Power Phototriac



[VO2223A](#)

- Optically coupled phototriac driving a power triac in a DIP-8 package
- Load current of 1 A_{RMS} and 5300 V of input-to-output isolation

NON-LINEAR RESISTORS

NTC Thermistors, Standard Lug Sensors



[NTCALUG03](#)

- Miniature surface temperature sensor
- Low thermal gradient, best in class

INDUCTORS

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



[IHLP-3232DZ-5A](#)

- High-temperature, high-efficiency power inductor for DC/DC conversion and filtering
- Continuous operation at 155 °C

CERAMIC CAPACITORS

IEC 60384-14:2005, CAN/CSA/cCSAus, and ANSI/UL CB Certificates



[MLCC SMD Safety Caps](#)

- Surface-mount design: simpler assembly and reduced board space requirement
- Available in NP0 (C0G) or X7R dielectrics

TANTALUM CAPACITORS

Solid Tantalum Surface-Mount Chip Capacitors, TANTAMOUNT[®], Standard Industrial Grade



[293D](#)

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

View datasheets for these products
www.vishay.com/ref/et3cn8a



OLED Displays for Illumination



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

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

RECTIFIERS

Schottky Barrier Rectifier

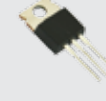


[MBR1060](#)

- Low power loss, high efficiency, low forward voltage drop
- High forward surge capability

MOSFETs

N-Channel 60 V (D-S) MOSFET



[SUP90N06-6m0P](#)

- TrenchFET® technology, maximum R_{DS(on)} 6 mΩ
- Popular TO-220 packaging

TANTALUM CAPACITORS

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

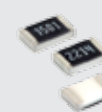


[298D](#)

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

RESISTORS

High-Voltage (up to 0.5 kV) Thick Film Chip Resistors



[RCV](#)

- High operating voltage (up to 500 V)
- Metal glaze on high-quality ceramic

RECTIFIERS

Dual High-Voltage Trench MOS Barrier Schottky Rectifier



[V80100PW](#)

- Trench MOS Schottky technology
- Low forward voltage drop, low power losses

NON-LINEAR RESISTORS

NTC Thermistors, Flex Foil Sensors



[NTCAFLEX05](#)

- Rapid response time on surface down to 2 s
- Suitable for narrow space applications

ALUMINUM CAPACITORS

Aluminum Capacitors SMD (Chip), High Temperature, Low Impedance



[146 RTI / 146 CTI](#)

- High temperature: 125 °C, long life, low impedance, high ripple current
- SMD: soldering according to JEDEC-J-STD-020



Conventional Lighting Control Gear



RECTIFIERS

Trench MOS Barrier Schottky Rectifier



[VT10200C](#)

- Trench MOS Schottky technology
- Low forward voltage drop, low power losses

RESISTORS

High-Ohmic / High-Voltage Metal Glaze Led Resistors



[VR25](#)

- Small size (0207), ohmic range 100 kΩ to 22 MΩ
- High continuous voltage of 1600 V, and high pulse loading capability of 7 kV

MOSFETs

E Series 600 V N-Channel Power MOSFET



[SiHD7N60E](#)

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

RESISTORS

Power Metal Film Led Resistors



[PR01/02/03](#)

- High power (1 W, 2 W, 3 W) in small package, non-flammable lacquer coating
- Various lead forming options

DIODES

Zener Diodes with Surge Current Specification



[BZD27CxxP Series](#)

- AEC-Q101 qualified
- Zener and surge current specification

RESISTORS

Metal Oxide Resistors, Special Purpose, High Voltage



[ROX](#)

- High voltage (up to 45 kV)
- Wide value range (100 Ω to 3 GΩ)

OPTOELECTRONICS

Ambient Light Sensor in Miniature 0805 Package with Phototransistor Output



[TEMT6200FX01](#)

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

RESISTORS

Carbon Film (Metal Alloy) Resistors, Special Purpose, High Voltage



[HVW](#)

- High voltage (up to 15 kV)
- Wide value range (1 kΩ to 200 MΩ)

FILM CAPACITORS

Single Metallized AC and Pulse Capacitors, MKP Radial Potted Type

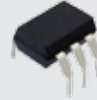


[MKP385](#)

- For pulse and resonant applications
- Low loss dielectric, small dimensions for high density packaging

OPTOELECTRONICS

Optocoupler, Zero Crossing Phototriac



[VO4157](#)

- 5000 V/μs dV/dt minimum with 800 V blocking voltage
- 300 mA on-state output current, and 1.6 mA trigger current with V_{ISO} of 5300 V

NON-LINEAR RESISTORS

PTC Thermistors for Overload Protection



[PTCCL...](#)

- Best current-size ratio
- UL recognized

OPTOELECTRONICS

Optocoupler, Power Phototriac



[VO2223A](#)

- Optically coupled phototriac driving a power triac in a DIP-8 package
- Load current of 1 A_{RMS} and 5300 V of input to output isolation

View datasheets for these products
www.vishay.com/ref/et3cn8c





Vishay Intertechnology, Inc.



A *WORLD OF*
SOLUTIONS