



Vishay Intertechnology, Inc.

# ***Industrial*** (Surveillance Systems)



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





**Industrial**

## Surveillance Systems

Cameras / CCTV	2
Access Control Systems / Door and Gate Opener	3
Biometrics	4
RFID	5

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

For inquiries, please contact your local sales representative.

## Key components for SURVEILLANCE SYSTEMS



### THE VISHAY ADVANTAGE

- Long Life
- High Reliability
- Safety Approvals
- High Power Density
- Ruggedized Construction

### Cameras / CCTV



### Access Control Systems / Door and Gate Openers



### Biometrics



### RFID





## Cameras / CCTV



## NON-LINEAR RESISTORS

**SMD 0402, Glass Protected NTC Thermistors**[NTCS0402](#)

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

## OPTOELECTRONICS

**High-Power SurfLight™ Emitter with 850 nm Peak Wavelength**[VSMY7850X01](#)

- Wavelength matches CMOS-based camera systems for vision systems
- 170 mW/sr intensity at 1 A forward current, 780 mW/sr at 5 A forward current

## FILM CAPACITORS

**DC Film Capacitors, MKT Axial Type**[MKT1813](#)

- General purpose MKT film capacitor
- Axial construction for low building height applications

## INDUCTORS

**Low-Profile, High-Current Inductors**[IFSC111AZER3RM01](#)

- Very small power inductor for low current DC/DC conversion and filtering

## DIODES

**Small-Signal Zener Diodes**[BZX84C18-E3-08](#)

- AEC-Q101 qualified
- Silicon planar Zener diodes

## NON-LINEAR RESISTORS

**SMD 0603, Glass Protected NTC Thermistors**[NTCS0603](#)

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

## MOSFETs

**Dual P-Channel 40 V (D-S) MOSFET**[Si7905DN](#)

- TrenchFET® technology providing two p-channel devices with maximum  $R_{DS(on)}$  of 60 mΩ
- Thermally enhanced PowerPAK® 1212-8 is 1/3 the size of an SO-8

## TANTALUM CAPACITORS

**Solid Tantalum Surface-Mount Chip Capacitors, TANTAMOUNT®, Molded Case**[293D](#)

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

## OPTOELECTRONICS

**High-Power SurfLight™ Emitter with 850 nm Peak Wavelength**[VSMY98545](#)

- Radiant intensity of 350 mW/sr at 1 A and 1600 mW/sr at 5 A pulsed
- Radiant power of 660 mW in a 3.85 mm x 3.85 mm x 2.24 mm package

## RECTIFIERS

**Surface-Mount Schottky Barrier Rectifiers**[MSS1P4](#)

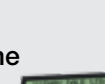
- AEC-Q101 qualified
- Very low profile – typical height of 0.65 mm

## OPTOELECTRONICS

**Optocoupler with Phototransistor Output and Trigger Current of  $I_F = 1$  mA**[VOS618A](#)

- High current transfer ratio, and high isolation voltage of 3750 V<sub>RMS</sub>
- Operating temp. from -55 °C to +110 °C in SSOP-4, half pitch, mini-flat package

## DISPLAYS

**High-Quality Displays Offer Excellent Human-to-Machine Interface Solutions**[LCD, Color TFT, OLED](#)

- Standard or customized glass / modules for specific applications and monitoring
- Color TFT for clarity

View datasheets for these products  
[www.vishay.com/ref/et3in4a](http://www.vishay.com/ref/et3in4a)



## Access Control Systems / Door and Gate Openers



### OPTOELECTRONICS

**Fixed Gain IR Receiver for Light Barriers up to 30 Meters**



[TSSP4038](#)

- Detection level does not change when ambient light or strong IR noise is applied
- Internal filter for 38 kHz IR signals with integrated signal processing

### CERAMIC CAPACITORS

**Body Sizes: 0402 to 3838, Excellent Power Handling Capabilities**



[MLCC RF Capacitors](#)

- Non-magnetic available with copper or epoxy bondable termination
- Lead-bearing termination available for hi-rel applications

### OPTOELECTRONICS

**Optocoupler with Low Input Current and Phototransistor Output in an SOP-4 Package**



[VOM618A](#)

- High current transfer ratio, and high isolation voltage of 3750 V<sub>RMS</sub>
- Operating temperature from -55 °C to +110 °C in a SOP-4 package

### ENERGY STORAGE CAPACITORS

**Hybrid Storage Capacitors**



[196 HVC ENYCAP™](#)

- Polarized electrochemical storage capacitor with high capacity and energy density
- No cell balancing necessary, soft and low transient voltage controlled charging

### TANTALUM CAPACITORS

**vPolyTan™ Solid Tantalum Surface-Mount Chip Capacitors, Molded Case, High-Performance Polymer Type**



[T55 Series](#)

- Ultra-low ESR, molded case available in 5 case codes
- Moisture sensitivity level 3

### DISPLAYS

**High-Quality Displays Offer Excellent Human-to-Machine Interface Solutions**



[LCD, Color TFT, OLED](#)

- Standard or customized glass / modules for specific applications and monitoring
- Can withstand extensive temperatures and extreme conditions



## Biometrics

## CERAMIC CAPACITORS

**Ultra-Stable Dielectric Formulation, Low Dissipation Factor (DF)**

[MLCC High Q Capacitors](#)

- Robust design build with wet process and noble metal electrodes



## ICs

**1.0 A Slew Rate Controlled Load Switch with Reverse Blocking in SC70-6, and TDFN4**

[SiP32431](#)

- Industry's lowest operating current (only 50 pA)
- Ideal for battery operated equipment



## INDUCTORS

**Low-Profile, High-Current IHLP® Inductors**

[IHLP-2020CZER4R7M01](#)

- Compact composite inductor for high-efficiency DC/DC conversion
- High frequency operation out to 5 MHz, excellent saturation



## OPTOELECTRONICS

**High-Power SurfLight™ Emitter with 850 nm Peak Wavelength**

[VSMY98545](#)

- Radiant intensity of 350 mW/sr at 1 A and 1600 mW/sr at 5 A pulsed
- Radiant power of 660 mW in a 3.85 mm x 3.85 mm x 2.24 mm package



## OPTOELECTRONICS

**Infrared Transceiver with Data Rate up to 115.2 kbit/s**

[TFBS4711](#)

- Small package (H x L x W): 1.9 mm x 3 mm x 6 mm and transmit range of 1 meter
- Idle current: 70  $\mu$ A, shutdown current: 10 nA, operates from 2.4 V to 5.5 V



## OPTOELECTRONICS

**High-Power SurfLight™ Emitter with 850 nm Peak Wavelength**

[VSMY7850X01](#)

- Wavelength matches CMOS-based camera systems for vision systems
- 170 mW/sr intensity at 1 A forward current, 780 mW/sr at 5 A forward current





## RFID



## MOSFETs

**P-Channel 20 V (D-S) MOSFET**[SiS407ADN](#)

- Industry leading p-channel Gen III technology, maximum  $R_{DS(on)}$  9 m $\Omega$
- Thermally enhanced PowerPAK® 1212-8 is 1/3 the size of an SO-8

## INDUCTORS

**Low-Profile, High-Current IHLP® Inductors**[IHLP-2020ABER2R2M01](#)

- Compact composite inductor for high-efficiency DC/DC conversion
- High frequency operation out to 5 MHz, excellent saturation

## OPTOELECTRONICS

**High Radiant Power and High-Speed 890 nm Infrared Emitter**[VSMF2890RGX01](#)

- Radiant intensity up to 350 mW/sr with  $I_F$  up to 1 A, 30 ns rise and fall time
- Angle of half intensity:  $\phi = \pm 12^\circ$  in gullwing or reverse gullwing package

## CERAMIC CAPACITORS

**Standard Reflow Process Assembly, High-Reliability Ceramic-Oxide Body Construction**[VJ5601M868MXBSR](#)

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

## OPTOELECTRONICS

**High Radiant Power and High-Speed 850 nm Infrared Emitter**[VSMG3700GS08](#)

- Radiant intensity up to 100 mW/sr with  $I_F$  up to 1 A, 20 ns rise time, 13 ns fall time
- Angle of half intensity:  $\phi = \pm 60^\circ$  in PLCC2 package

## 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

## ENERGY STORAGE CAPACITORS

**Hybrid Storage Capacitors**[196 HVC ENYCAP™](#)

- Power back up for memory controller, industrial PC, real time clock
- Storage device for energy harvesting, emergency light and micro power supplies

## NON-LINEAR RESISTORS

**NTC Thermistors, 2-Point Micro Chip Sensor Insulated Leads**[NTCLE305E4...](#)

- Miniature insulated leads
- AEC-Q200 compliant, fast response time for exposed mounting



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A *WORLD OF*  
*SOLUTIONS*