

## 主要元件 车身电子



舒适、车门、  
车窗控制



信息娱乐、  
导航、音响



车内  
LED 照明



### VISHAY 优势

- 通过 AEC 认证
- 高功率密度
- 小尺寸
- 耐用
- 可定制

## 舒适、车门、车窗控制

### MOSFETs

**N-Channel MOSFETs in 5 mm x 6 mm PowerPAK®, 40 V, 58 A, 6.3m Ω**



#### [SQJ868EP](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Thermally enhanced PowerPAK SO-8L replaces DPAK in less than half of the area

### RECTIFIERS

**Surface-Mount Schottky Barrier Rectifiers**



#### [MSS1P4](#)

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

### DIODES

**SMD Power ESD Diodes, Up to ± 30 kV, I<sub>FSM</sub> = 50 A**



#### [SMFxx](#)

- SMF package: 3.5 mm x 1.9 mm
- Breakdown voltage = 6.4 V to 64.4 V

### 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

### OPTOELECTRONICS

**Ambient Light PIN Photodiode Sensors**



#### [TEMD6200FX01](#)

- SMD 0805 package, low profile of 0.85 mm, wide viewing angle of ± 60 °
- Spectral sensitivity close to human eye, high signal output linearity

### OPTOELECTRONICS

**Silicon PIN Photodiode with Excellent Output Linearity Characteristics**



#### [VEMD6160X01](#)

- SMD 1206 package, daylight blocking filter, wide viewing angle of ±70°
- Low capacitance of 4.6pF, ideal for noisy environments and small signal detection

### INDUCTORS

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



#### [IHLP-4040DZ-5A](#)

- Excellent high-current performance for noise filters
- High-temperature operation up to 155 °C

### TANTALUM CAPACITORS

**Solid Tantalum Chip Capacitors, High CV Leadframeless Molded, Automotive Grade**



#### [TP3 / TP8](#)

- TP3 - AEC-Q200 qualified; low ESR; A, B, C, D and E cases
- TP8 - AEC-Q200 qualified

### ALUMINUM CAPACITORS

**Aluminum Capacitors, Increased Vibration Resistance**



#### [246 CTI-V](#)

- High temperature, low impedance, high vibration capability
- High ripple current, long useful life

### OPTOELECTRONICS

**SMD Silicon PIN Photodiodes with Large Active Area for High Photo Currents**



#### [VEMD5110X01](#)

- QFN package with wettable flanks, reduced noise sensitivity
- Wide operating temperature range of -40 ° to +110 °C, wide viewing angle of ± 65°

### OPTOELECTRONICS

**850 nm SMD Infrared Emitters**



#### [VSMY1850ITX01](#)

- SMD 0805 package, low profile of 0.85 mm, high radiant intensity of 10 mW/sr
- Wide operating temperature range of -40 ° to +105 °C, wide viewing angle of ± 60°

### CERAMIC CAPACITORS

**High Operating Temperature, Automotive Grade Leaded MLCC Capacitors**



#### [HOTcap® K...H, A...R, K...R](#)


- High-reliability MLCC insert with wet build process
- High operating temperature (up to 175 °C for K...H and up to 160 °C for A...R and K...R), rated voltages: 50 V, 100 V, 200 V

## 信息娱乐、导航、音响



**MOSFETs**

**Dual N-Channel MOSFETs in 5 mm x 6 mm PowerPAK®, 40 V, 11 mΩ / 22 mΩ**




[SQJ942EP](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Optimized for high-frequency DC/DC applications, lower switching losses

**OPTOELECTRONICS**

**890 nm SMD Infrared Emitters**




[VSMF970011X01](#)

- Low-profile PLCC<sup>2</sup> package, wavelength matched to sensitivity of proximity sensor
- External emitter to enable gesture function of proximity sensor

**INDUCTORS**

**IHLP® High-Temperature (155 °C) Parts in Double Inductor Package**




[IHLD-4032KB-5A](#)

- Optimal design provides high quality sound and low distortion
- Low coupling for minimal cross-talk between inductors

**RESISTORS**

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



[RCWE0603](#)

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

**OPTOELECTRONICS**

**Integrated Proximity and Ambient Light Sensors with I<sup>2</sup>C Interface**




[VCNL4020X01](#)

- Low-profile QFN SMD package, 16 bit resolution, proximity distance up to 200 mm
- Suitable for extended detection range, gesture function with external emitters

**MOSFETs**

**Dual N-Channel MOSFETs in 5 mm x 6 mm PowerPAK®, 12 V, 2.7 mΩ / 7.4 mΩ**




[SQJ202EP](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Low-voltage, high-frequency synchronous buck applications, lower switching losses

**RECTIFIERS**

**Surface-Mount Schottky Barrier Rectifiers**




[MSS1P4](#)

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

**INDUCTORS**

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



[IHLP-2525CZ-5A](#)

- Excellent high-temperature performance for DC/DC converter input and output filters

**RESISTORS**

**Precision Thin Film Resistor Arrays, Superior Moisture Resistivity, TCR ± 0.05**



[ACAS 0606 AT](#)

- Arbitrary resistance ratio up to 1:20, superior tracking stability over lifetime
- Relative TCR down to ± 5 ppm/K (tracking), AEC-Q200 qualified

**TANTALUM CAPACITORS**

**Solid Tantalum Chip Capacitors, High CV Leadframeless Molded, Automotive Grade**



[TP8](#)

- Smallest AEC-Q200 qualified tantalum capacitors with case sizes as small as 0603

**CERAMIC CAPACITORS**

**AEC-Q200 Qualified, Broad Range of Sizes and Working Voltages, C0G (NPO), X7R, and X8R**



[VJ...31X RoHS Automotive MLCCs](#)

- RoHS and Green compliant parts available
- AgPd termination available for epoxy bonding

**INDUCTORS**

**High-Curent SMD Inductors with E-Field Shielding and 155 °C Operating Temperature**



[IHLE-3232DD-5A](#)


- Excellent EMI protection, double-shielded

## 车内 LED 照明



RESISTORS

**Pulse-Proof, High-Power Thick Film Chip Resistors**




[CRCW-HP e3](#)

- Excellent pulse load capability
- Enhanced power rating

MOSFETs

**P-Channel MOSFETs in 3 mm x 3 mm PowerPAK® 1212, -60 V, -16 A, 65 mΩ**




[SQ7415AENW](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- High power density PowerPAK® 1212 with wettable flanks for AOI

RECTIFIERS

**Surface-Mount Schottky Barrier Rectifiers**




[MSS1P6](#)

- Low-profile MicroSMP package for low-voltage, high-frequency inverters; DC/DC converters; and polarity protection applications

MOSFETs

**N-Channel MOSFETs in 3 mm x 3 mm PowerPAK® 1212, 60 V, 18 A, 23 mΩ**

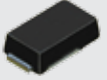


[SQ7414AENW](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- High power density PowerPAK® 1212 with wettable flanks for AOI

RECTIFIERS

**100 V, 2 A High-Voltage Schottky Diodes, T<sub>j</sub> = 175 °C**

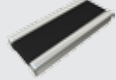


[SS2PH10](#)

- SMP(DO-220AA) package, 3.7 mm x 2.18 mm

RESISTORS

**Power Metal Strip® SMD Resistors, Wide Terminal, 1 mΩ to 3 mΩ, 1 W**

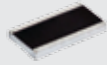


[WSL0612](#)

- Low EMF, high temperature up to 170 °C

RESISTORS

**Thick Film Surface-Mount Chip Resistors, Wraparound, Extremely Low Values**




[RCWE0603](#)

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

NON-LINEAR RESISTORS

**SMD Glass-Protected NTC Thermistors**




[NTCS...e3](#)

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

INDUCTORS

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



[IHLP-1616BZ-A1](#)

- Shielded construction, lowest DCR/μH in this package size
- Excellent DC/DC energy storage up to 5 MHz

TANTALUM CAPACITORS

**Solid Tantalum Molded Chip Capacitors, Automotive Grade**



[TP3](#)

- AEC-Q200 qualified, low ESR
- A, B, C, D, and E cases

