



## Active Safety

# Advanced Driver Assistance System (ADAS)



### MOSFETs

N-Channel MOSFETs in 3 mm x 3 mm Dual PowerPAK®, Rated at 40 V, 6 A, 25 m&



- TrenchFET® power MOSFET
- AEC-Q101 qualified

[SQS944ENW](#)

### INDUCTORS

Low-Profile, High-Current IHLP® Inductors



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

[IHLP-1616BZ-A1](#)

### TVS PROTECTION DIODES

Surface-Mount PAR® TVS Diodes, 600 W, 6.8 V to 51 V, Low Profile (1 mm)



- Very low-profile DO-221AC (SlimSMA™) package - typical height of 0.95 mm
- T<sub>j</sub> = 185 °C

[TA6Fxx](#)

### OPTOELECTRONICS

Fully Integrated Proximity and Ambient Light Sensor with I2C Interface



- Integrated current driver with internal logic to drive up to three IREDs
- Low-profile QFN SMD package, 16 bit resolution, proximity distance up to 200 mm
- Up to 4 different slave addresses for more sensors on I2C bus

[VCNL4035X01](#)

### MOSFETs

N-Channel MOSFETs in 2 mm x 2 mm PowerPAK®, Rated at 60 V, 78 A, 28 m&



- Halogen-free According to IEC 61249-2-21 Definition
- TrenchFET® Power MOSFET
- AEC-Q101 qualified

[SQA410EJ](#)

### POWER RECTIFIERS

Surface-Mount Schottky Barrier Rectifiers

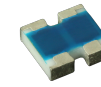


- Very low profile - typical height of 0.65 mm
- AEC-Q101 qualified

[MSS1P4](#)

### RESISTORS

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



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

[ACAS 0606 AT](#)

### TANTALUM CAPACITORS

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



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

[TP8](#)

### INDUCTORS

IHLE® High Current SMD Inductors With E-Field Shield, Operating Temperature 155 °C



- Excellent EMI protection, double-shielded

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

### RESISTORS

High Frequency, 50 GHz, Thin Film Chip Resistors



- Operating frequency 50 GHz
- Thin film microwave resistors

[CH](#)

### CERAMIC CAPACITORS

AEC-Q200 Qualified for High Frequency Circuits With Ultra Stable Dielectric Material, Broad Range of Sizes and Working Voltages



- Case size 0402, 0603, 0805, 0505, 1111
- High frequency

[GA...31M Automotive HiFREQ MLCCs](#)

### INDUCTORS

IHLP® Automotive Inductors, High Temperature (155 °C)



- Shielded construction
- High temperature, up to 155 °C

[IHLP-1212BZ-5A](#)

#### POWER ICs

**Automotive 125 °C Analog Switch,  
Dual DPDT / Quad SPDT**



- 1.8V to 5.5 V single supply operation
- Low resistance: 0.37  $\Omega$ /p. at 2.7 V

[DGQ2788A](#)

#### ESD PROTECTION DIODES

**Bidirectional Symmetrical (BiSy)  
Low Capacitance, Dual-Line ESD  
Protection Diode**

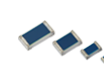


- 2-line ESD protection diode with  $\pm 26.5$  V working range in SOT-23 package
- Low load capacitance  $C_D$   $\leq 13$  pF
- For CAN and FLEX-Bus applications

[VCAN26A2-03S](#)

#### RESISTORS

**Ultra Precision Thin Film Chip Re-  
sistors, Tolerance down to 0.02 %,  
TCR down to 2 ppm/K, 0402 to  
1206 Case Sizes**



- Low temperature coefficients and tight tolerances
- Excellent overall stability  $\leq 0.05$  % (1000 h rated power at 70 °C)
- Sulfur resistance verified according to ASTM B 809

[TNPU e3](#)

#### RESISTORS

**SMD Thick Film Resistors, High  
Stability, Sulfur-Resistant**



- TCR = 50 ppm/K to 200 ppm/K
- Metal glaze on high quality ceramic with protective overglaze
- Sulfur resistant

[RCA](#)

#### POWER RECTIFIERS

**2 A 30 V TMBS® (Trench MOS  
Barrier Schottky) Rectifier**



- Very low profile - typical height of 0.65 mm
- Ideal for automated placement

[MSS2P3HM3](#)