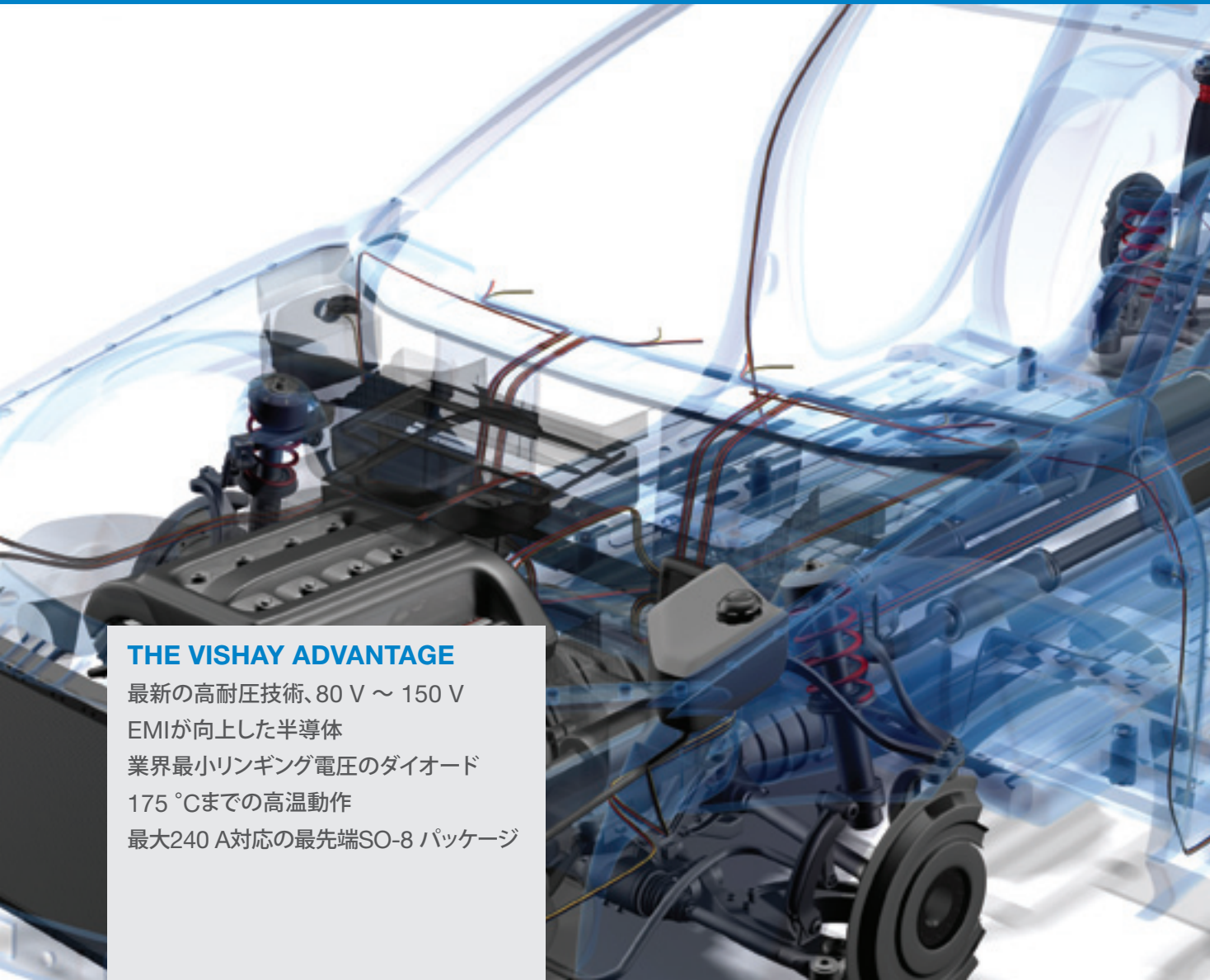


48 V_{DC} ボードネット用主要部品



統合型スタータ
ジェネレーター
(48 V_{DC})



DC/DCコンバータ、
双方向
(48 V_{DC})



HVAC (E-Compressor for
48 V_{DC}用Eコンプレッサ)



THE VISHAY ADVANTAGE

最新の高耐圧技術、80 V ~ 150 V
EMIが向上した半導体
業界最小リンギング電圧のダイオード
175 °Cまでの高温動作
最大240 A対応の最先端SO-8 パッケージ



統合型スタータ ジェネレーター (48 V_{DC})



MOSFETs

N-Channel MOSFETs in 5 mm x 6 mm PowerPAK® SO-8L Rated at 80 V, 7 mΩ



[SQJA80EP](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Ultra-low R_{DS(on)}, thermally enhanced PowerPAK® 8x8L replaces D²PAK in less than half of the area

NON-LINEAR RESISTORS

SMD Glass-Protected NTC Thermistors




[NTCS...e3](#)

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

MODULES

MOSFET H Bridges or B6 Bridges Based on Customer Specifications




[EMIPAK 1B/2B Customized](#)

- 80 V to 100 V MOSFET power modules

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

MOSFETs

N-Channel MOSFETs as Known Good Die, 100 V, 3.6 mΩ




[SQC260N10 3m6KDG](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Efficient KGD packaging allows high power density and reduced parasitics

INDUCTORS

EMI Filters with Flat Copper Wire, SMD or Leaded Up to 260 A



[Customized EMI Filters](#)

- Customized solutions for 48 V applications, low DCR, high current

FILM CAPACITORS

DC-Link Polyester Film Capacitors, Operating Temperature Up to 150 °C, High Ripple Current




[MKT1820S](#)

- Low voltage DC-link capacitors with high-temperature capabilities
- Customized solutions for 48 V applications

RESISTORS

Power Metal Strip® Meter Shunt Resistor, Very Low Value (Down to 100 μΩ)



[WSMS2908](#)

- Extremely low resistance values: 100 μΩ to 1000 μΩ
- 3 W power capability with sensing terminals to mount on PCB

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

RECTIFIERS

TVS Clamping Diodes, Up to 1.5 kW



[1.5 SMC Series](#)

- DO-214AB (SMCJ) package to protect ICs, MOSFETs, and signal lines of sensor units against voltage transients induced by inductive load switching and lightning

DC/DCコンバータ、 双方向 (48 V_{DC})


RESISTORS

Professional High-Temperature Mini-MELF Resistors



[MMA 0204 HT](#)

- Operating temperature up to 175 °C, power handling of 500 mW, high surge capability
- AEC-Q200 qualified, high overall stability $|\Delta R/R| \leq 0.1 \%$, intrinsically sulfur-resistant

RESISTORS

Thin Film Resistors, 4.7 Ω to 3.01 MΩ, 0402 to 1210 Case Sizes, 50 V to 200 V



[TNPW e3](#)

- Excellent stability $|\Delta R/R| \leq 0.05 \%$ after 1000 h at 70 °C, 0402 to 1210 case sizes

INDUCTORS

Low-Profile, High-Current IHLP® Inductors



[IHLP-8787MZ-5A](#)

- Highest current composite inductor available
- High temperature operation up to 155 °C, shielded construction

MOSFETs

N-Channel MOSFETs in 8 mm x 8 mm PowerPAK® 8x8L, 80 V, 150 A, 2.7 mΩ



[SQJQ480E](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Ultra-low $R_{DS(on)}$, thermally enhanced package reduces board area

MOSFETs

N-Channel MOSFETs in 8 mm x 8 mm PowerPAK®, 40 V, 160 A, 1.2 mΩ

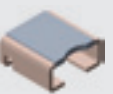


[SQJQ100EL](#)

- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Ultra-low $R_{DS(on)}$, thermally enhanced PowerPAK® 8x8L replaces D²PAK in less than half of the area

RESISTORS

Power Metal Strip® SMD Resistors, 4-Terminal, Low Values (Down to 0.0001 Ω)



[WSK1216](#)

- High power rating of 3 W to 5 W with TCR = 20 ppm/K
- Very low resistance values, 0.0001 Ω to 0.004 Ω, with tolerance of 1 %

INDUCTORS

Shielded SMD Low-Profile, High-Current IHLP® Inductors, EMI Filter, 155 °C, Low DCR



[IHLP-6767GZ-5A](#)

- Very high-current and high-temperature operation for filters

INDUCTORS

Coupled Inductors for SEPIC Converter



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

- High-temperature operation up to 155 °C
- Frequency range up to 5.0 MHz

INDUCTORS

EMI Filters with Flat Copper Wire as SMD or Leaded, Up to 260 A



[Customized EMI Filters](#)

- Customized solutions for 48 V applications, low DCR, high current

FILM CAPACITORS

DC-Link Polyester Film Capacitors, Operating Temperature Up to 150 °C, High Ripple Current



[MKT1820S](#)

- Low voltage DC-link capacitors with high-temperature capabilities
- Customized solutions for 48 V applications

FILM CAPACITORS

SMD Aluminum Capacitors, High Temperature Up to 150 °C, Low ESR



[260 CLA-V](#)

- High ripple current up to 1400 mA at 150 °C, capacitance up to 3300 μF
- Useful life up to 2000 h at 150 °C, high vibration capability

CERAMIC CAPACITORS

X1/Y2 AC Line Rated Ceramic Disc Capacitors for Automotive Applications



[AY2](#)

- AEC-Q200 qualified, X1/Y2 safety rating according to IEC 60384-14, 3rd edition
- Proven to withstand 3000 temperature cycles from -55 °C to +125 °C



HVAC (48 V_{DC} 用Eコンプレッサ)



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

NON-LINEAR RESISTORS

SMD Glass-Protected NTC Thermistors



[NTCS...e3](#)

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

CAPACITORS MLCC

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

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High Operating Temperature, Automotive Grade Leaded MLCC Capacitors



[HOTcap® K...H, A...R, K...R](#)

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- 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

MOSFETs

N-Channel MOSFETs in 8 mm x 8 mm PowerPAK® 8x8L, 80 V, 150 A, 2.7 mΩ



[SQJQ480E](#)

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Low Profile, High Current IHLP® Inductors



[IHLP-8787MZ-5A](#)

- Highest current composite inductor available
- High temperature operation up to 155 °C, shielded construction

FILM CAPACITORS

DC-Link Polyester Film Capacitors, Operating Temperature Up to 150 °C, High Ripple Current



[MKT1820](#)

- Automotive general purpose capacitors with high temperature capabilities
- Capacitance up to 560 μF

RESISTORS

Power Metal Strip® SMD Resistors, 4-Terminal; Low Value (Down to 0.0001 Ω)



[WSK1216](#)

- High power rating of 3 W to 5 W with TCR = 20 ppm/K
- Very low resistance values, 0.0001 Ω to 0.004 Ω, with tolerance of 1 %

INDUCTORS

Shielded EMI Filters Up to 190 A I_{DCR}, 2.2μH, Ultra-Low DCR (0.22 mΩ)



[IHLX-2000VZ-5A](#)

- Very high-current and high-temperature operation for filters and energy storage

ALUMINUM CAPACITORS

SMD Aluminum Capacitors, High Temperature Up to 150 °C, Low ESR



[260 CLA-V](#)

- High ripple current up to 1400 mA at 150 °C, capacitance up to 3300 μF
- Useful life up to 2000 h at 150 °C, high vibration capability