

EPS Electric Power Steering

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EPS Electric Power Steering

VISHAY components used for EPS include:

- Power MOSFETs
- Diodes
- Capacitors
- High-Stability Precision Resistors
- Inductors / EMI Filters
- Transient / Overvoltage Protection Devices
- ESD Protection Devices
- Reverse Polarity Protection Devices

Application Overview

Electric power assisted steering (EPS) uses an electric motor to provide directional control to the driver, without any hydraulic systems. Sensors detect the motion and torque of the steering column and a computer module applies assistive power via an electric motor coupled directly to either the steering gear or steering column. Most EPS systems have variable assist, which provides more assistance as the speed of a vehicle decreases, and less assistance from the system during high-speed situations. This functionality requires a delicate balance of power and control that has only been available in recent years. In the event of a component failure, a mechanical linkage such as a rack and pinion serves as a back-up in a manner similar to that of hydraulic systems. The EPS system is gradually replacing the hydraulic steering system and is likely to soon become mainstream among automotive manufacturers. VISHAY's broad product line includes components for power supply (SMPS), input signal conditioning, power stage, and vehicle communication functions.

EPS Electric Power Steering : CAN BUS, ESD Protection

Ceramic Capacitors

Product Name	Status	Description	Features	Package	Q-Level
VJHiRelX5R		MLCC for High-Reliability Applications	100p...6,8µF, 6,3Vdc...500Vdc	SMD 0402...3640	
VJHiRelX7R		MLCC for High-Reliability Applications	100p...6,8µF, 6,3Vdc...500Vdc	SMD 0402...3640	

Small Signal Diodes

Product Name	Status	Description	Features	Package	Q-Level
GCDA15C-1		Low Capacitance Bidirectional (BiAs) ESD Protection; Data Line Protection;	Vesd=30KV, Ipp=10A, Ppp=300W	SMD SOT-143	
GL05T		Low Capacitance ESD Protection; Data Line Protection;	Ppk=300W, Vrrm=70V, Ippm=17A	SMD SOT-23	
GL24T		Low Capacitance ESD Protection; Data Line Protection;	Ppk=300W, Vrrm=70V, Ippm=5A	SMD SOT-23	

Thick Film Resistors

Product Name	Status	Description	Features	Package	Q-Level
CRCW0402		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 0402	AEC Q200
CRCW0603		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 0603	AEC Q200
CRCW0805		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 0805	AEC Q200
CRCW1206		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 1206	AEC Q200
CRCW1210		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 1210	AEC Q200
CRCW2010		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 2010	AEC Q200
CRCW2512		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 2512	AEC Q200
RCA2010	NEW	Automotive Grade; Thick Film; Sulfure-Resistant Termination,	1R..10M, 1%, TCR100	SMD 2010	AEC Q200
RCA2512	NEW	Automotive Grade; Thick Film; Sulfure-Resistant Termination,	1R..10M, 1%, TCR100	SMD 2512	AEC Q200

TVS Diodes

Product Name	Status	Description	Features	Package	Q-Level
SM5A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=500A	SMD DO-218AB	AEC Q101
SM8A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=700A	SMD DO-218AB	AEC Q101

EPS Electric Power Steering : CAN BUS, ISO9141 Bus Transceiver

Integrated Circuit

Product Name	Status	Description	Features	Package	Q-Level
Si9241AEY		Single-Ended Bus Transceiver	200kB typical, reverse BAT protection	SMD SO-8	
Si9243AEY		Single-Ended Bus Transceiver	200kB typical, reverse BAT protection	SMD SO-8	

EPS Electric Power Steering : CAN BUS, K-Line Bus Controller

Integred Circuit

Product Name	Status	Description	Features	Package	Q-Level
Si9200EY-T1-E3		CAN Bus Driver and Receiver	Single supply	SMD SO-8	

EPS Electric Power Steering : CONTROLLER / ASICS, Filtering

Inductor

Product Name	Status	Description	Features	Package	Q-Level
IHLP1616AB-11		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,047 μ H...2,2 μ H, Idc=15A...3A	SMD 1616	AEC Q200
IHLP1616BZ-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,1 μ H...2,2 μ H, Idc=35A...6A	SMD 1616	AEC Q200

Tantalum Capacitor

Product Name	Status	Description	Features	Package	Q-Level
293D		Low Profile; Low Leakage Current; Automotive specified	4V-50VDC ; 0,1 μ F-680 μ F	SMD A/B/C/D/E Case	AEC Q200
TH3		150°C rated, Low ESR; 100% surge current tested,	10V-50VDC; 0,33-100 μ F;	SMD A/B/C/D/E Case	AEC Q200
TR3		Low Profile, Low Leakage Current, low ESR , Automotive specified	4V-50VDC ; 0,47 μ F-680 μ F	SMD A/B/C/D/E Case	AEC Q200

EPS Electric Power Steering : CONTROLLER / ASICS, Pull-Up / Pull-Down Resistors and Arrays

Resistor Array

Product Name	Status	Description	Features	Package	Q-Level
CRA04S CRA04P		Thick Film Resistor Array	10-1M Ω m, 63mW	SMD / Array 0603	
CRA06		Thick Film Resistor Array	10-1M Ω m, 63mW	SMD / Array 0603	AEC Q200
CRA12		Thick Film Resistor Array	10-1M Ω m, 100mW	SMD / Array 1206	AEC Q200

EPS Electric Power Steering : INPUT SIGNAL CONDITIONING, ESD Protection

Ceramic Capacitors

Product Name	Status	Description	Features	Package	Q-Level
VJHiRelX5R		MLCC for High-Reliability Applications	100p...6,8μF,	SMD 0402...3640	
VJHiRelX7R		MLCC for High-Reliability Applications	100p...6,8μF, 6,3Vdc...500Vdc	SMD 0402...3640	

Small Signal Diodes

Product Name	Status	Description	Features	Package	Q-Level
GCDA15C-1		Low Capacitance Bidirectional (BiAs) ESD Protection; Data Line Protection;	Vesd=30KV, Ipp=10A, Ppp=300W	SMD SOT-143	
GL05T		Low Capacitance ESD Protection; Data Line Protection;	Ppk=300W, Vrrm=70V, Ippm=17A	SMD SOT-23	
GL24T		Low Capacitance ESD Protection; Data Line Protection;	Ppk=300W, Vrrm=70V, Ippm=5A	SMD SOT-23	

Thick Film Resistors

Product Name	Status	Description	Features	Package	Q-Level
CRCW0402		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 0402	AEC Q200
CRCW0603		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 0603	AEC Q200
CRCW0805		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 0805	AEC Q200
CRCW1206		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 1206	AEC Q200
CRCW1210		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 1210	AEC Q200
CRCW2010		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 2010	AEC Q200
CRCW2512		Bulk Resistors; Pulse resistant; Good Long-Term Stability;	1R..10M, 1%, TCR100	SMD 2512	AEC Q200
RCA2010	NEW	Automotive Grade; Thick Film; Sulfure-Resistant Termination,	1R..10M, 1%, TCR100	SMD 2010	AEC Q200
RCA2512	NEW	Automotive Grade; Thick Film; Sulfure-Resistant Termination,	1R..10M, 1%, TCR100	SMD 2512	AEC Q200

TVS Diodes

Product Name	Status	Description	Features	Package	Q-Level
SM5A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=500A	SMD DO-218AB	AEC Q101
SM8A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=700A	SMD DO-218AB	AEC Q101

EPS Electric Power Steering : INPUT SIGNAL CONDITIONING, Position

Optical

Product Name	Status	Description	Features	Package	Q-Level
TCPT1300X01		Dual Transmissive Optical Sensor With Phototransistor Outputs		SMD L 5.5xW4xH4mm Gap: 3mm	AEC Q101
TCUT1300X01		Transmissive Optical Sensor With Phototransistor Output		SMD L 5.5xW4xH4mm Gap: 3mm	AEC Q101

EPS Electric Power Steering : INPUT SIGNAL CONDITIONING, Temperature

NTC

Product Name	Status	Description	Features	Package	Q-Level
NTCS0402E3		Small Dimension, Rugged Construction, High Reliability;	4K7...100K	SMD 0402	
NTCS0603E3		Small Dimension, Rugged Construction, High Reliability;	2K2...100K	SMD 0603	
NTCS0805E3		Small Dimension, Rugged Construction, High Reliability;	2K2...680K	SMD 0805	
NTHS		Small Dimension, Rugged Construction, High Reliability;	1K...350K	SMD 0402...1012	

PTC

Product Name	Status	Description	Features	Package	Q-Level
TFPT		Linear PTC thermistor; surface-Mount Chip;	TCR=2300...3500 +-300ppm	SMD 0603, 0805, 1206	

EPS Electric Power Steering : INPUT SIGNAL CONDITIONING, Ultra-Stable Voltage Divider

Resistor Arrays

Product Name	Status	Description	Features	Package	Q-Level
ACAC 0612 Precision		Flat Chip Resistor Array	100 - 221k Ohm, +-25ppm/K +-0,25%	SMD array 0612	AEC Q200
ACAS 0612 Precision		Flat Chip Resistor Array	100 - 221k Ohm, +-25ppm/K +-0,25%	SMD array 0612	AEC Q200

EPS Electric Power Steering : POWER STAGE, 3-Phase Motor Switch

MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SUM110N04-03P		N-Channel 40-V (D-S), 175°C MOSFET	rDS(on)=3.1mOhm	SMD TO-263 (D ² PAK)	
SUM110N04-05H		N-Channel 40-V (D-S), 175°C MOSFET; Logic Level	rDS(on)=5,0mOhm	SMD TO-263 (D ² PAK)	
SUM110N04-05H		N-Channel 40-V (D-S) 175°C MOSFET	rDS(on)=0.0053Ohm	SMD TO-263 (D ² PAK)	
SUM110N04-2m3L		N-Channel 40-V (D-S) MOSFET	rDS(on)=2.3mOhm	SMD TO-263 (D ² PAK)	

EPS Electric Power Steering : POWER STAGE, Current Sensing

Shunt

Product Name	Status	Description	Features	Package	Q-Level
WSL2512		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0,001 to 0,500 Ohm	SMD SMD2512	AEC Q200
WSL2512-18		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0,001 to 0,500 Ohm	SMD SMD2512	AEC Q200
WSL3921		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0,0003 to 0,004 Ohm, 3W	SMD SMD3921	AEC Q200
WSL5931		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0,0002 to 0,003 Ohm, 5W	SMD SMD5931	AEC Q200
WSLP1206		Power Metal Strip® Resistors; SMD; High Power; Low Value;	R001...R05, 1%, 1W TCR = 75ppm/°C	SMD 1206	AEC Q200
WSR2		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0.001 to 1.0, 2W	SMD SMD4527	AEC Q200
WSR3		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0.001 to 0.2, 3W	SMD SMD4527	AEC Q200
WSR5		Power Metal Strip® Resistors; SMD; High Power; Low Value;	0.001 to 0.3, 5W	SMD SMD4527	AEC Q200

EPS Electric Power Steering : POWER STAGE, Filtering

Alu Elcaps

Product Name	Status	Description	Features	Package	Q-Level
140CRH		Aluminum Capacitors; SMD (Chip); High-Temperature, Pb-Free	10 μ F...680 μ F, Life@125°C 2000h	SMD max.10x10x14	AEC Q200
140RTM		Aluminum Capacitors; Radial; High-Temperature 125 degree	22....4700 μ F	TH / Radial Radial	
148RUS		Aluminum Capacitors; Radial; High CV	47....22000 μ F	TH / Radial Radial	
150CRZ		Aluminum Capacitors; SMD (Chip); Very Low Z; Pb-Free;	33...2200 μ F, Life@105°C 5000h	SMD max 12,5x12,5x16	AEC Q200
153CRV		Aluminum Capacitors; SMD (Chip); Long-Life Vertical, Pb-Free	0,47....1000 μ F, Life@105°C 2000h	SMD max.10x10x14	AEC Q200

Inductor

Product Name	Status	Description	Features	Package	Q-Level
IHLP1616BZ-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,1 μ H...2,2 μ H, Idc=35A...6A	SMD 1616	AEC Q200
IHLP2525AH-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,1 μ H...4,7 μ H, Idc=40A...8A	SMD 2525	AEC Q200
IHLP2525EZ-01		Low Profile, High Current, Shielded, Low DCR, High Saturation	0,56 μ H...10 μ H, Idc=12A...4,5A	SMD 2525	AEC Q200
IHLP4040DZ-01		Low Profile, High Current, Shielded, Low DCR, High Saturation	0,19 μ H...10 μ H, Idc=90A...12A	SMD 4040	AEC Q200
IHLP5050CE-01		Low Profile, High Current, Shielded, Low DCR, High Saturation	0,1 μ H...10 μ H, Idc=43A...7A	SMD 5050	AEC Q200
IHLP5050EZ-01		Low Profile, High Current, Shielded, Low DCR, High Saturation	0,1 μ H...10 μ H, Idc=55A...9A	SMD 5050	AEC Q200

EPS Electric Power Steering : POWER STAGE, Freewheeling diode

Schottky Diodes

Product Name	Status	Description	Features	Package	Q-Level
MBRB16H35HE3	SOON	Low Vf, High Current Density	Vrr=35V, If=16A	SMD TO-263 (D ² PAK)	AEC Q101
MBRB16H45HE3		Low Vf, High Current Density	Vrr=45V, If=16A	SMD TO-263 (D ² PAK)	AEC Q101

EPS Electric Power Steering : POWER SUPPLY, EMI Filtering

Inductors

Product Name	Status	Description	Features	Package	Q-Level
IHLP2525EZ-01		Low Profile, High Current; High Transient Current Spike Capable; Shielded; Low DCR;	0,56 μ H...10 μ H, Idc=12A...4,5A	SMD 2525	AEC Q200
IHLP4040DZ-01		Low Profile, High Current; High Transient Current Spike Capable; Shielded; Low DCR;	0,19 μ H...10 μ H, Idc=90A...12A	SMD 4040	AEC Q200
IHLP5050FD-01		Low Profile, High Current; High Transient Current Spike Capable;	0,1 μ H...10 μ H, Idc=120A...15,5A	SMD 5050	AEC Q200

EPS Electric Power Steering : POWER SUPPLY, Linear Voltage Regulaton

LDO

Product Name	Status	Description	Features	Package	Q-Level
Si9181		Micropower 350-mA CMOS LDO Regulator With Error Flag/Power-On-Reset, Adjustable Output Voltage;	Vin=6,5V, Iout=350mA	SMD TSSOP-8	
Si91871		300-mA Ultra Low-Noise LDO Regulator With Discharge Option;	Vin=6,5V, Iout=300mA	SMD MLP33-5	

EPS Electric Power Steering : POWER SUPPLY, Quiescent Current Switch-Off

MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SUD50P04-09L		P-Ch, Tj=175°C Power MOSFET, Low Leakage Current;	P-Ch, 40-V (D-S) MOSFET;; rDS(on)=0,0094Ohm	SMD TO-252 (DPAK)	
SUD50P06-15L		P-Ch, Tj=175°C Power MOSFET, Low Leakage Current;	P-Ch, 60-V (D-S) MOSFET;; rDS(on)=0,015Ohm	SMD TO-252 (DPAK)	
SUM110P04-05		P-Ch MOSFET, 12V/24V Boardnet; (KL15) High-Side Power Switch; Stand-By Mode;	P-Ch, 40-V (D-S) MOSFET;; rDS(on)=0,005Ohm	SMD TO-263 (D ² PAK)	
SUM110P06-07L		P-Ch MOSFET, 12V/24V Boardnet; (KL15) High-Side Power Switch; Stand-By Mode;	P-Ch, 60-V (D-S) MOSFET;; rDS(on)=0,0069Ohm	SMD TO-263 (D ² PAK)	

EPS Electric Power Steering : POWER SUPPLY, Reverse Polarity Protection

MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SQ2309ES	NEW	P-Ch, MOSFET for General Application, IC-Protection; Automotive AEC-Q101 qualified	P-Ch, 60-V (DS) MOSFET; $r_{DS(on)} = .335R @ 10V$ $I_d = -1.7Amp$	SMD TO-236 (SOT-23)	
SQ7415EN	NEW	Low Thermal Resistance; Fast Switching; Fully AEC Q-101 Qualified;	P-Ch, $r_{DS(on)} = 0,065Ohm$	SMD PPAK1212-8	AEC Q101
SUD08P06-155L		P-Ch, $T_j = 175^{\circ}C$ Power MOSFET; Low Leakage Current;	P-Ch, $r_{DS(on)} = 0,155Ohm$	SMD TO-252 (DPAK)	
SUD19P06-60L		P-Ch, $T_j = 175^{\circ}C$ Power MOSFET; Low Leakage Current;	P-Ch, $r_{DS(on)} = 0,06Ohm$	SMD TO-252 (DPAK)	

Schottky Diodes

Product Name	Status	Description	Features	Package	Q-Level
SS3P6LHE3	NEW	Low Profile, Low Vf; High Current Density	$V_f = 0,478V$	SMD TO-277A (SMPC)	AEC Q101
SS5P5HE3	NEW	Low Profile, Low Vf; High Current Density	$V_f = 0,560V$	SMD TO-277A (SMPC)	AEC Q101

Thick Film Resistors

Product Name	Status	Description	Features	Package	Q-Level
CRCW0603LR		Sense Resistors; Pulse resistant; good long term stability;	R22...R91, 5%, TCR200	SMD 0603	AEC Q200
CRCW1206LR		Sense Resistors; Pulse resistant; good long term stability;	R22...R91, 5%, TCR200	SMD 0805	AEC Q200
CRCW1210LR		Sense Resistors; Pulse resistant; good long term stability;	R22...R91, 5%, TCR200	SMD 1206	AEC Q200

TVS Diodes

Product Name	Status	Description	Features	Package	Q-Level
SM5A27HE3		High Surge, Low Vf, Low Leakage; High Reliability; Broad Range of Breakdown Voltages;	$V_{br} = 27V$, $I_{fsm} = 500A$	SMD DO-218AB	AEC Q101
SM8A27HE3		High Surge, Low Vf, Low Leakage; High Reliability; Broad Range of Breakdown Voltages;	$V_{br} = 27V$, $I_{fsm} = 700A$	SMD DO-218AB	AEC Q101
SM8S24AHE3		High Surge, Low Vf, Low Leakage; High Reliability; Broad Range of Breakdown Voltages;	$I_{ppm} = 38,9A$, $I_{fsm} = 700A$	SMD DO-218AB	AEC Q101

EPS Electric Power Steering : POWER SUPPLY, SMPS Buck

Alu Elcaps

Product Name	Status	Description	Features	Package	Q-Level
150CLZ		Aluminum Capacitors; SMD (Chip); Very Low Z	33...1000µF, Life@105°C 2000h	SMD max.10x10x14	AEC Q200
150CRZ		Aluminum Capacitors; SMD (Chip); Very Low Z; Pb-Free;	33...2200µF, Life@105°C 5000h	SMD max 12,5x12,5x16	AEC Q200
153CLV		Aluminum Capacitors; SMD (Chip); Long-Life Vertical	0,47....1000µF, Life@105°C 2000h	SMD max.10x10x14	AEC Q200
153CRV		Aluminum Capacitors; SMD (Chip); Long-Life Vertical, Pb-Free	0,47....1000µF, Life@105°C 2000h	SMD max.10x10x14	AEC Q200

Ceramic Capacitors

Product Name	Status	Description	Features	Package	Q-Level
VJHiRelX5R		MLCC for High-Reliability Applications	100p...6,8µF, 6,3Vdc...500Vdc	SMD 0402...3640	
VJHiRelX7R		MLCC for High-Reliability Applications	100p...6,8µF, 6,3Vdc...500Vdc	SMD 0402...3640	
VJOMD X7R		SMD Ceramic Capacitor Solutions For Boardflex-Sensitive Applications	100p...1,8µF, 50Vdc...3000Vdc	SMD 1206...2225	
VJOMD-COG	NEW	SMD Ceramic Capacitor Solutions For Boardflex-Sensitive Applications	100p...47µF, 50Vdc...3000Vdc	SMD 1206...2225	

Current Sense Shunt Resistors

Product Name	Status	Description	Features	Package	Q-Level
CRCW1218LR		Sense Resistors; Pulse resistant; Good Long-Term Stability; Jumper	R10...R91, 5%, TCR200	SMD 1218	AEC Q200
CRCW2010LR		Sense Resistors; Pulse resistant; Good Long-Term Stability; Jumper	R10...R91, 5%, TCR200	SMD 2010	AEC Q200
CRCW2512LR		Sense Resistors; Pulse resistant; Good Long-Term Stability; Jumper	R10...R91, 5%, TCR200	SMD 2512	AEC Q200
WSL1206-18		Power Metal Strip Shunts; Very Low R-Value; Very Low TCR; Low Thermal EMF;	R002...R2, 1%, 0,5W TCR = 75ppm/°C	SMD 1206	AEC Q200
WSL2010-18		Power Metal Strip Shunts; Very Low R-Value; Very Low TCR; Low Thermal EMF;	R001...R5, 1%, 1W TCR = 75ppm/°C	SMD 2010	AEC Q200
WSL2512-18		Power Metal Strip Shunts; Very Low R-Value; Very Low TCR; Low Thermal EMF;	R001...R01, 1%, 2W TCR = 75ppm/°C	SMD 2512	AEC Q200
WSL2816		Power Metal Strip Shunts; Very Low R-Value; Very Low TCR; Low Thermal EMF;	2W or 3W R01...R1, 1%, TCR = 75ppm/°C	SMD 2816	AEC Q200
WSLP1206		Power Metal Strip Shunts; Very Low R-Value; Very Low TCR; Low Thermal EMF;	R001...R05, 1%, 1W TCR = 75ppm/°C	SMD 1206	AEC Q200
WSLT2512		Power Metal Strip, High Temp. (275°C), Low TCR, Low Thermal EMF	0.01 - 0.50 Ohm, 1%, 1W TCR = 75ppm/°C	SMD 2512	AEC Q200

Inductors

Product Name	Status	Description	Features	Package	Q-Level
IHLP1616BZ-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,1µH...2,2µH, Idc=35A...6A	SMD 1616	AEC Q200
IHLP2525AH-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,1µH...4,7µH, Idc=40A...8A	SMD 2525	AEC Q200

Product Name	Status	Description	Features	Package	Q-Level
IHLP2525CZ-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,1μH...10μH, Idc=60A...7A	SMD 2525	AEC Q200
IHLP2525EZ-01		Low Profile; High Current; Shielded; Low DCR; High Saturation;	0,56μH...10μH, Idc=12A...4,5A	SMD 2525	AEC Q200

MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
Si2318CDS	NEW	N-Ch MOSFET 40V (D-S)	rDS(on) = 0,042Ohm ID=5.6	SMD TO-236 (SOT-23)	
SQ2328ES		N-Ch MOSFET for 24V Boardnet SMPS, Buck	N-Ch, 100-V (DS) MOSFET; rDS(on) = 0,3Ohm	SMD TO-236 (SOT-23)	
SQD50N06-09L		N-Channel 60-V (D-S), 175C MOSFET; Logic Level;	N-Ch, 60-V (DS) MOSFET; rDS(on) = 0.009Ohm	SMD TO-252 (DPAK)	AEC-Q
SUD15N06-90L		N-Channel 60-V (D-S), 175C MOSFET; Logic Level;	N-Ch, 60-V (DS) MOSFET; rDS(on) = 0,009Ohm	SMD TO-252 (DPAK)	

Schottky Diodes

Product Name	Status	Description	Features	Package	Q-Level
SS3P4LHE3	NEW	Low Vf, High Current Density	Vf=0,335V	SMD TO-277A (SMPC)	AEC Q101
SS3P6LHE3	NEW	Low Vf, High Current Density	Vf=0,478V	SMD TO-277A (SMPC)	AEC Q101

Tantalum Capacitor

Product Name	Status	Description	Features	Package	Q-Level
293D		Low Profile; Low Leakage Current; Automotive Specified	4V-50VDC ; 0,1μF-680μF	SMD A/B/C/D/E Case	AEC Q200
TH3		150°C rated, Low ESR; 100% Surge Current Tested,	10V-50VDC; 0,33-100μF;	SMD A/B/C/D/E Case	AEC Q200
TR3		Low Profile, Low Leakage Current, Low ESR , Automotive Specified	4V-50VDC ; 0,47μF-680μF	SMD A/B/C/D/E Case	AEC Q200

EPS Electric Power Steering : POWER SUPPLY, Transient Protection

TVS Diodes

Product Name	Status	Description	Features	Package	Q-Level
SM5A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=500A	SMD DO-218AB	AEC Q101
SM6A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=600A	SMD DO-218AB	AEC Q101
SM8A27HE3		High Surge, Low Vf, Low Leakage; High Reliability;	Vbr=27V, Ifsm=700A	SMD DO-218AB	AEC Q101

