

LED Lighting - NEW

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LED Lighting - NEW

Power Metal Strip Resistors

- Iron Powder Core Power Inductors
 - Schottky Diodes
 - Power MOSFETs
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Application Overview

For Automotive Front lighting is a stable input voltage for switched mode current regulator an important tool. First the battery voltage has to be stabilized with a Buck Boost to provide to next multiple Buck converter stages a stable input voltage. Depends on led-string solutions the total current defines the power level of various buck stages. The main buck-boost has to have the total power level for complete lighting control unit. The efficiency of buck-converters depend on synchronous or non-synchronous topology. For the light engine is also a feedback loop for led-string current control quite important.

LED Lighting - NEW : 12V Input, EMI Filter

Al Cap

Product Name	Status	Description	Features	Package	Q-Level
260 CLA-V		Alumimum Capacitor SMD vibration proof and high temperature	150...3300uF; 16V...80V Low Impedance,Low ESR 2000h at 150°C	SMD 18x18x21	AEC-Q200

Custom Magnetics

Product Name	Status	Description	Features	Package	Q-Level
customized EMI filter		customized EMI filter			

MLCC

Product Name	Status	Description	Features	Package	Q-Level
VJ...31X RoHS Automotive		SMD Multilayer Ceramic Chip Capacitors for Automotive Applications	120pF...1uF; 16V...1000V High operating temperatur compliant with ELV directiv	SMD 0402 to 1812	AEC-Q200

LED Lighting - NEW : 12V Input, reverse polarity protection

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SQJ868EP		N-Channel 40-V (D-S) 175°C MOSFET Single	Rdson=7,3mOhm	PPAK SO-8L	AEC-Q101

LED Lighting - NEW : 12V Input, transient protection

TVS Diode

Product Name	Status	Description	Features	Package	Q-Level
1.5 SMC Series		surface mounteTransZorb Transient Voltage Suppressor	1500W	SMCJ	AEC-Q101

LED Lighting - NEW : Boost power supply, SMPS boost converter

Inductor

Product Name	Status	Description	Features	Package	Q-Level
IHLP4040DZ-5A		Low Profile, High Current, High Transient Current Spike Cabable, Shielded, Low DCR	0,47uH...47uH; Idc=30A...2.5A	4040	AEC-Q200
IHLP5050FD-5A		Low Profile, High Current, Shielded, Low DCR High Transient Current Spike Cabable	0,22uH...22uH, Idc=66A...8,3A	5050	AEC-Q200

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SQJ464EP		N-Channel 60-V (D-S) 175°C MOSFET	Rdson=17mOhm	PowerPAK® SO-8L	AEC-Q101

Schottky Diode

Product Name	Status	Description	Features	Package	Q-Level
SS1FH10		High Current Density Surface Mount Schottky Barrier Rectifier	iF=1A; Vf=0.57V; Vrrm=100V	'DO-219AB(SMF)	AEC-Q101
SS2FH10		High Current Density Surface Mount Schottky Barrier Rectifier	If=2A; Vf=0.5V; Vrrm=100V	DO-219AB(SMF)	AEC-Q101
SS5P10HM		High Current Density Surface Mount Schottky Barrier Rectifier	IF= 5.0 A, VRRM=100 V	TO-277A (SMPC)	AEC-Q101

LED Lighting - NEW : Front Lighting Buck Converter, buffer capacitor

Al Cap

Product Name	Status	Description	Features	Package	Q-Level
260 CLA-V		Alumimum Capacitor SMD vibration proof, high temperature	150...3300uF; 16V...80V Low Impedance,Low ESR 2000h at 150°C	SMD 16x16x16 to 18x18x21	AEC-Q200

LED Lighting - NEW : Front Lighting Buck Converter, high side current sensor

Shunt

Product Name	Status	Description	Features	Package	Q-Level
WSL		Power metal strip resistor	≥ 0.0005 Ohm	0603...2816	AEC-Q200

LED Lighting - NEW : Front Lighting Buck Converter, high side switch

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SQJ456EP		N-Channel 100V (D-S) 175°C MOSFET	RdsOn=26mOhm	SMD PPAK SO-8L	AEC-Q101

Schottky Diode

Product Name	Status	Description	Features	Package	Q-Level
SS2FH10		40V; 60V or 100V depends on Voltage of LED or LED Strin	If=2A, Vf=0,5; Vrrm 40V; 60V; 100V	SMD DO-219(SMF)	
SS5P10HM		100V, 5A SKY Diode	iF=5A, Vf=0,649V; Vrrm=100V	SMD TO-277A(SMPC)	

LED Lighting - NEW : Front Lighting Buck Converter, Low and high side switch

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SQJ942EP		Dual N-Channel 40V (D-S) 175 °C MOS Asymetric device perfect for synchronous rectification	Rdsonlow=11mOhm, Rdson high=22mOhm 100 % R g and UIS Tested	SMD PPAK SO-8L DUAL	AEC-Q101

LED Lighting - NEW : Front Lighting Buck Converter, Low side switch

MOSFET

Product Name	Status	Description	Features	Package	Q-Level
SQS484EN		N-Channel 40V (D-S) 175°C MOSFET	Rdson= 9mOhm	SMD PPAK 1212-8	AEC-Q101
SQS840EN		N-Channel 60V (D-S) 175°C MOS	Rdson= 20mOhm	SMD PPAK 1212-8	AEC-Q101

LED Lighting - NEW : Front Lighting Buck Converter, storage inductor

Inductor w e-Field Shield

Product Name	Status	Description	Features	Package	Q-Level
IHLE4040DD-5A		Low Profile, High Current, Low DCR and with e-field shield High Transient Current Spike Cabable, Shielded	0,47uH...47uH, Idc=30A...2.5A	4040	AEC-Q200

Inductors

Product Name	Status	Description	Features	Package	Q-Level
IHLP4040DZ-5A		Low Profile, High Current, Shielded, Low DCR High Transient Current Spike Cabable	0,47uH...47uH, Idc=30A...2.5A	4040	AEC-Q200
IHLP5050FD-5A		Low Profile, High Current,Shielded, Low DCR High Transient Current Spike Cabable	0,22uH...22uH, Idc=66A...8,3A	5050	AEC-Q200

LED Lighting - NEW : LED String, LED Light

Power SMD LED

Product Name	Status	Description	Features	Package	Q-Level
VLMW712U2U3XV		Little Star Cool White	87400.....113600 mlm	6.0 x 6.0 x 1.5	

LED Lighting - NEW : LED String, Current Sensing/LED String or LED

Current Sensing/LED String or LED

Product Name	Status	Description	Features	Package	Q-Level
RCWE		Thick Film SMD Chip Resistor Low Ohmig	0.01 Ω to 0.976 Ω	0402...2512	AEC-Q200
RCWE1020		Thick Film SMD Chip Resistor Low Ohmig High Power	2A ; 0.01Ohm...0,976 Ohm	1020	AEC-Q200
RCWL		Thick Film SMD Chip Resistor Low Ohmig	0.1 Ω to 0.91 Ω	0402...2512	AEC-Q200

LED Lighting - NEW : LED String, Sensor

RGBW Sensor

Product Name	Status	Description	Features	Package	Q-Level
VEML6040		RGBW Color Sensor with I2C Interface	I2C Interface	2.0 x 1.25 x 1.0	