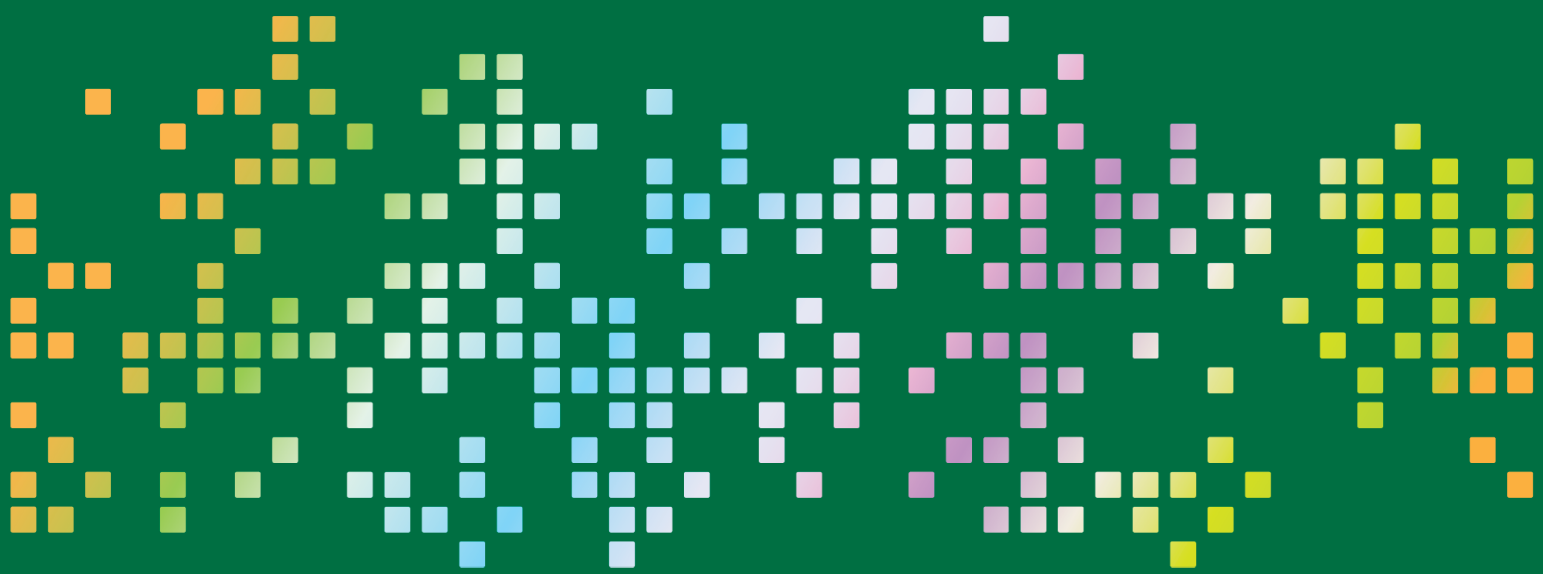


POWER MASTER 半导体有限责任公司

POWER MASTER半导体公司提供能源、云服务、电动汽车和工业应用的高压和中压产品解决方案

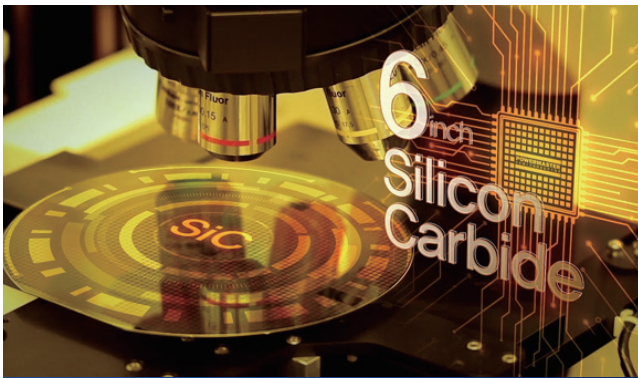


关于 Power Master 半导体公司

2018年1月，数十位来自世界顶尖半导体公司且在设计、工艺、应用和市场营销方面拥有20多年经验的专家创立了PMS 公司。PMS是一家韩国IDM功率半导体公司，拥有自己的晶圆厂(FAB)和研发中心。



韩国功率器件科技领导者



Silicon Carbide SiC MOSFET / SiC Diode



Silicon Super Junction MOSFET / MV MOSFET

公司信息

- 具备设计和制造能力的碳化硅和硅功率器件集成制造商 (IDM)
- 员工人数: 240人

可靠性/失效分析实验室

- 汽车级/工业级认证的可靠性实验室
- 具备完善的设备和失效分析系统
- 拥有IATF 16949, ISO 9001/14001认证

产品开发和成果

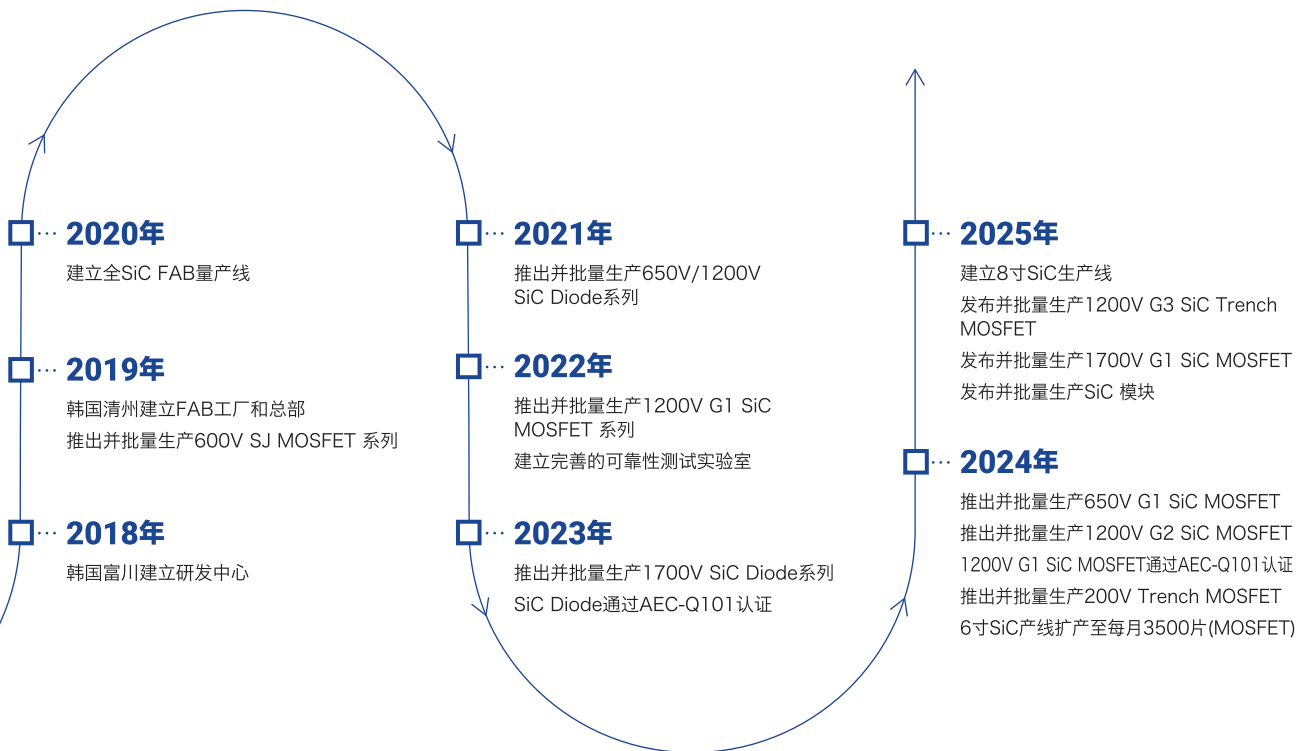
- 2021年: 650V/1200V碳化硅二极管
- 2022年: 1200V碳化硅MOSFET G1
- 2023年: 1700V碳化硅二极管
1200V碳化硅二极管 通过AEC-Q101认证
- 2024年: 650V碳化硅MOSFET G1和1200V碳化硅MOSFET G2
1200V碳化硅MOSFET G1通过AEC-Q101认证
1700V碳化硅MOSFET研发
200V沟槽MOSFET

优势和强项

- 技术领先且可控的核心工艺流程
- 世界级的失效分析和应用工程技术支持
- 拥有AEC-Q101认证的碳化硅功率半导体产品
- 自有工厂产能不断提升

公司历史

在国际头部公司领导的功率器件市场上，PMS将不断为客户推出高性价比的新产品，以满足云、计算、电信、可再生能源、工业和电动车应用等领域对高效能的需求。



地址



嘉兴, 中国
封测



深圳, 中国
销售办公室



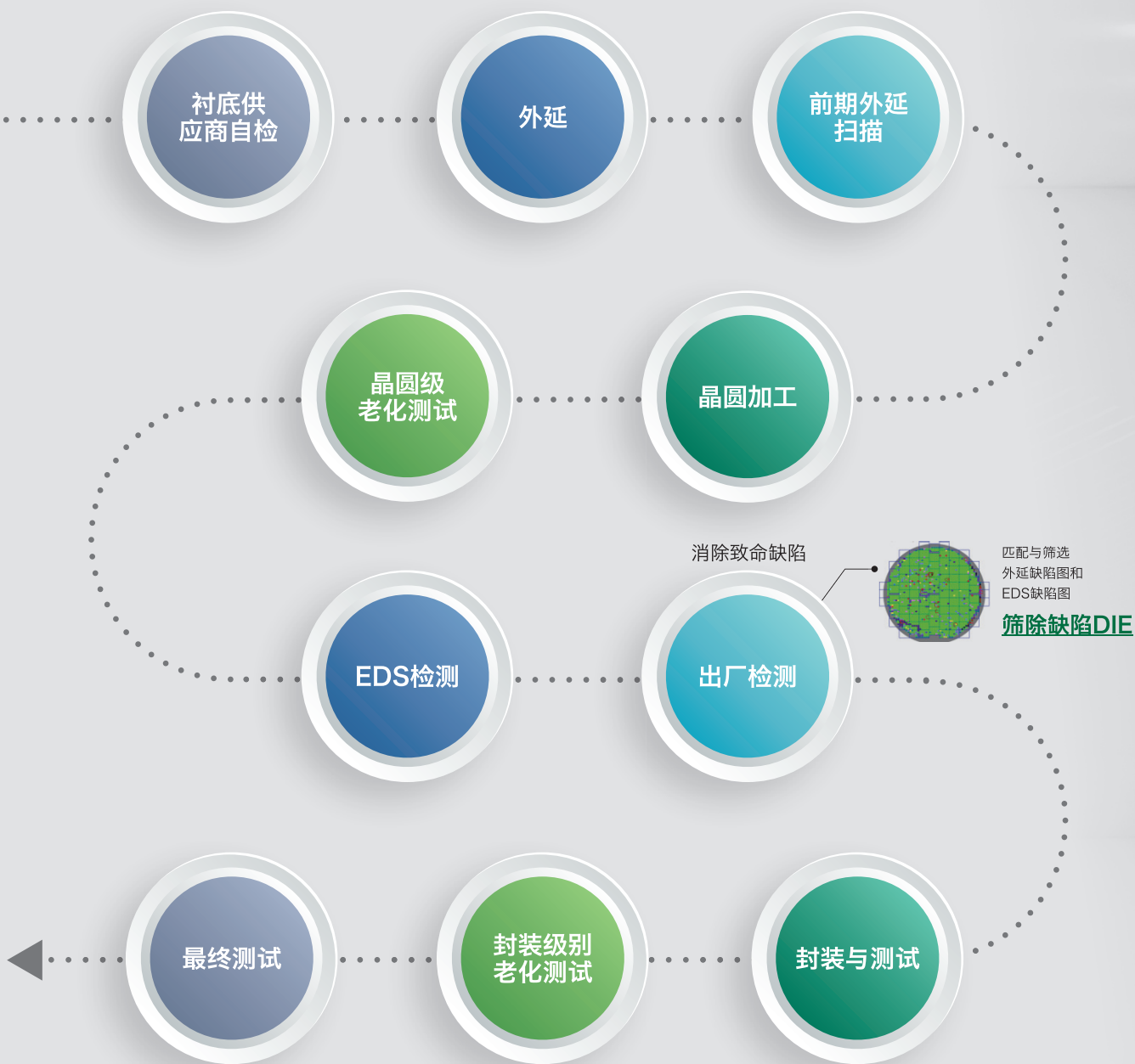
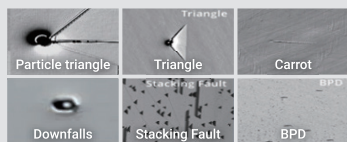
清州, 韩国
FAB & 总部



仁川, 韩国
研发和销售办公室

SiC 产品质量提升措施

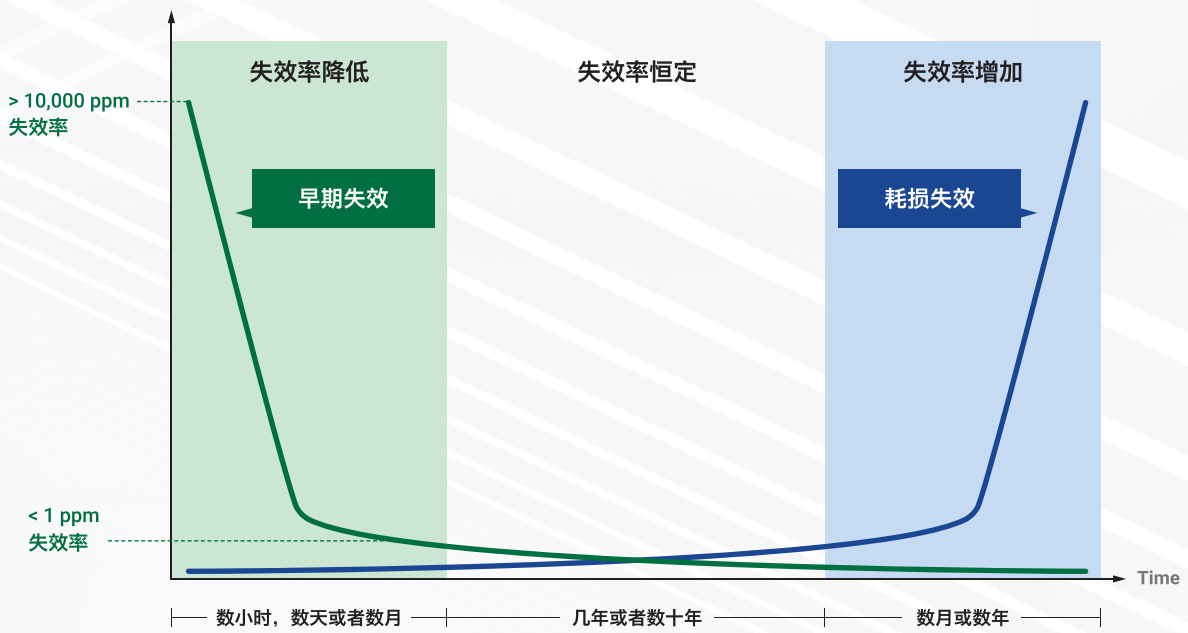
前期外延扫描用于提升质量



* 选择晶圆级或封装级老化测试取决于最终产品的封装和应用场景

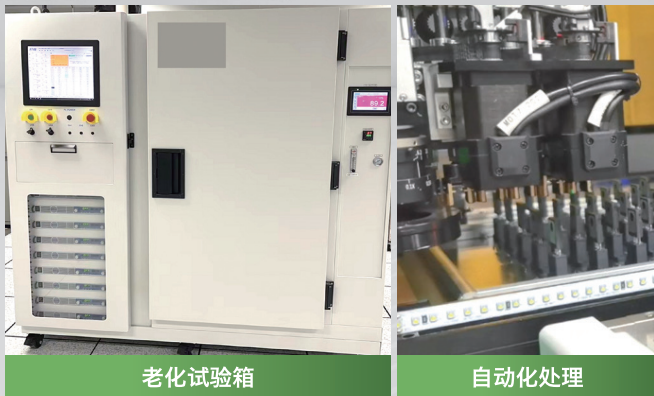
SiC MOSFET 老化系统

筛除早期失效器件



封装级

SiC MOSFET 产品老化



晶圆级

SiC MOSFET 产品老化

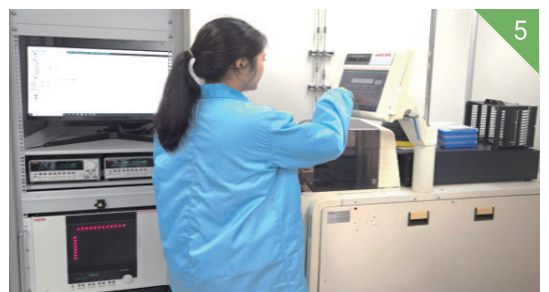


质量与可靠性

可靠性实验室

可靠性测试项目	可靠性测试条件
HTRB, HTGB	~200°C, ~2000V
H3TRB	85°C/85%RH, ~2000V
HAST	130°C/85%RH ~2000V
TC	-55~150C, -65~150C
HTSL/LTSL	-50~200C
THU	85°C/85%
IOL	delta Tj 100C
Reflow	260°C peak
WLR	1 wafer/once
PCT	12pcs
PLBI	2560pcs
WLBI	1350ch

1. 跟踪监测所有供应商
2. 实验室
3. 实验室
4. 智能化实验室 (HTRB/HTGB)
5. 晶圆级可靠性试验
6. 功率循环测试
7. IOL 测试
8. 电气测试



失效分析实验室

FA Equipment

高倍率显微镜

低倍率显微镜

自动和手动研磨机

机械研磨机

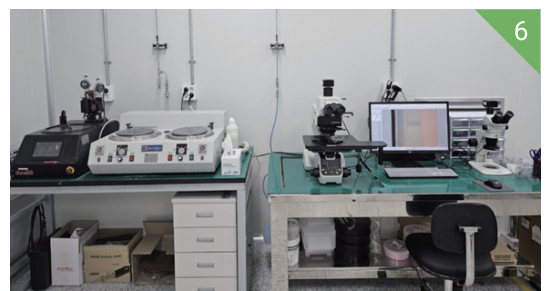
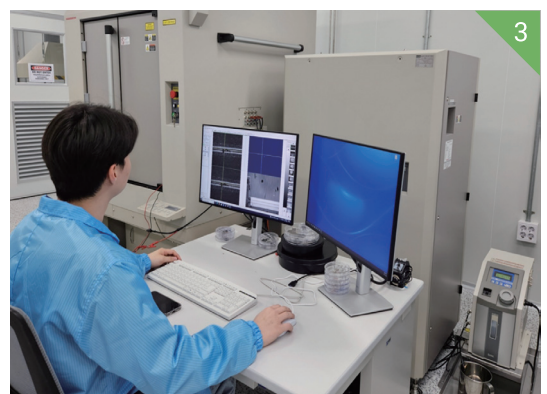
开盖工作台

电子束显微镜检查

扫描电子显微镜

聚焦离子束

1. 失效分析实验室 (更多设备即将进驻)
2. 开盖工作台
3. 电子束显微镜检查分析
4. 扫描电子显微镜分析
5. SRP分析
6. 研磨/显微镜

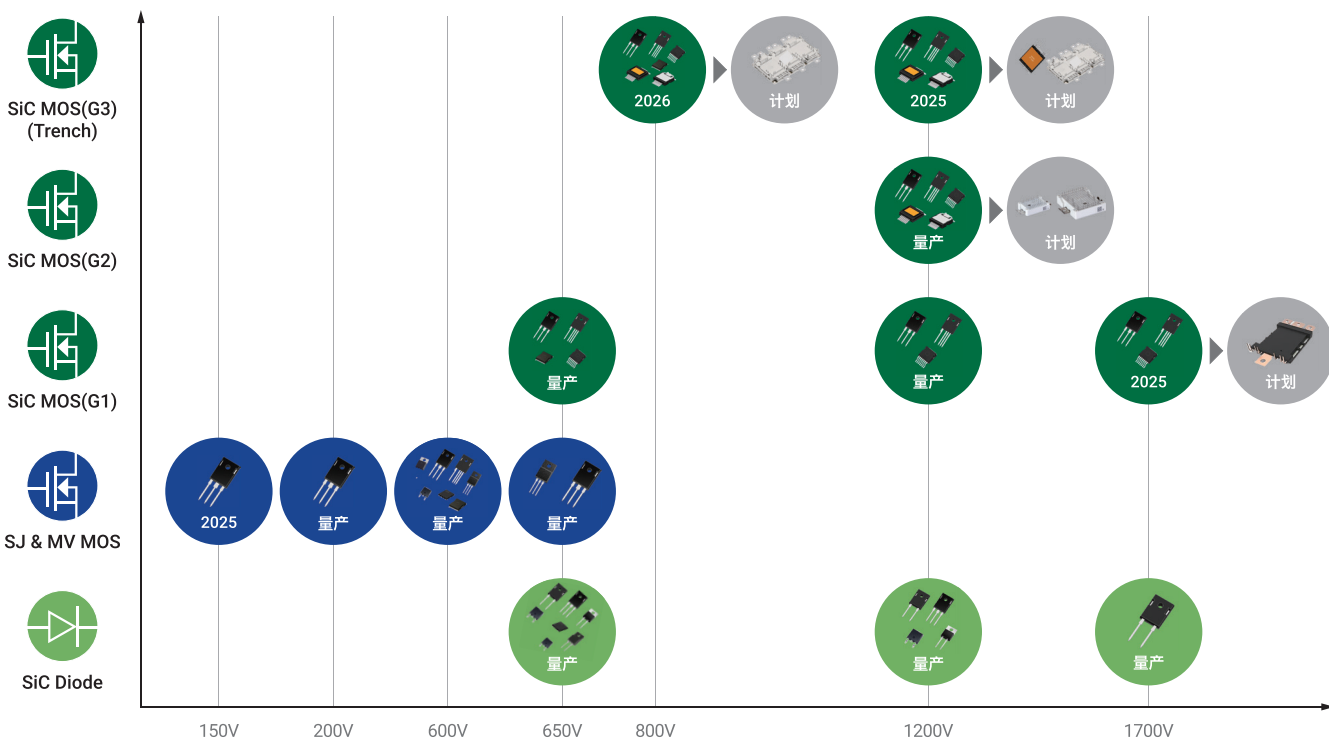


碳化硅和硅应用



Power Master 产品

Power Master 半导体公司提供能源、云服务、电动汽车和工业应用的高压(SiC和SJ)和中压产品解决方案



650V Gen1 eSiC MOSFET

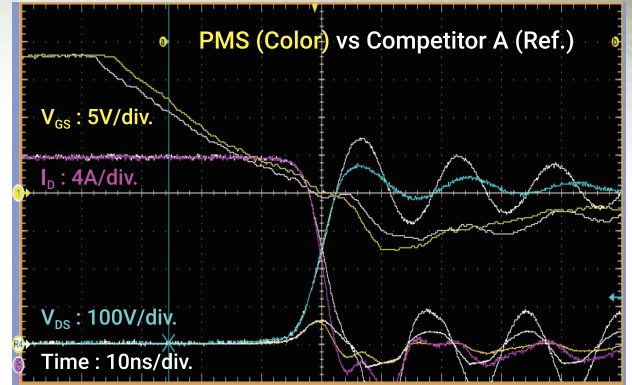
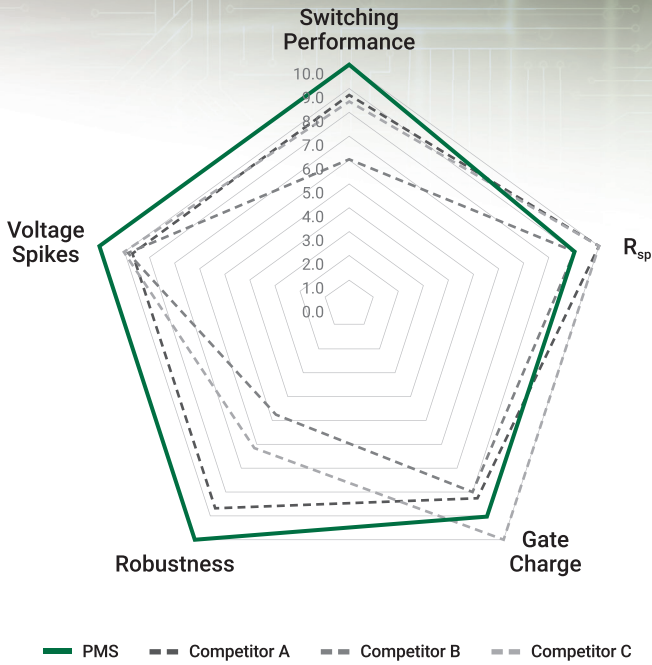
关键特征

- 极低的开关损耗
- 低FOM: $Q_G \times R_{DS(ON)}$
- 快速本征二极管

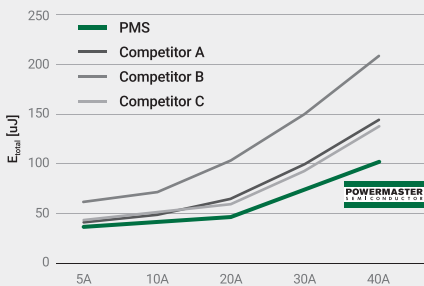
主要优点

- 更高的系统频率和可靠性
- 更低的散热要求
- 更高的频率适用性
- 更高的功率密度

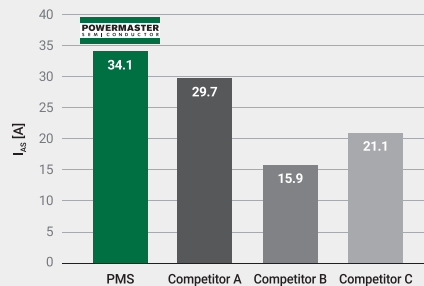
目标应用



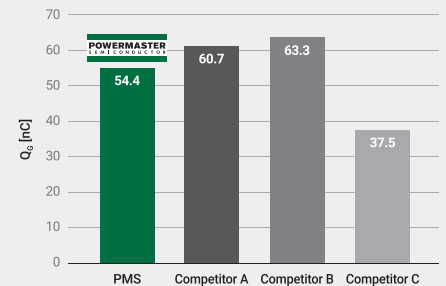
Lower Switching Spikes



Switching Losses



UIS Ruggedness

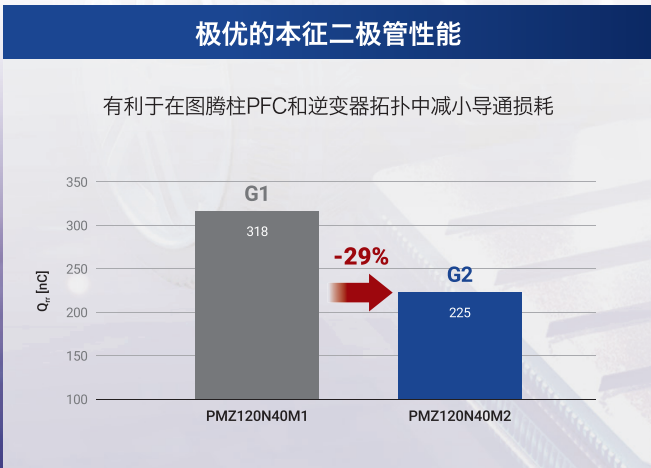
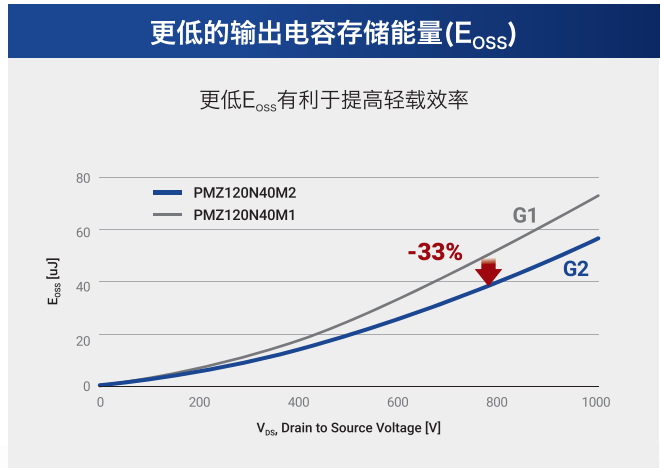
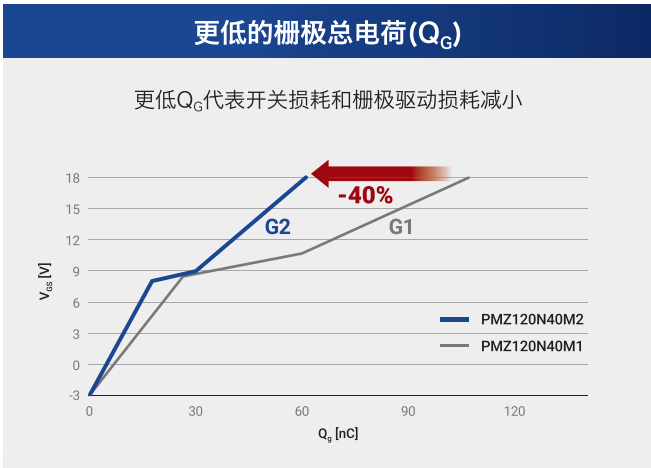


Gate Charge

1200V Gen2 eSiC MOSFET



关键特征	主要优点
更好的开关性能	更高的系统效率
更低的FOM : $Q_G \times R_{DS(ON)}$, $E_{OSS} \times R_{DS(ON)}$, $Q_{OSS} \times R_{DS(ON)}$	更低的散热要求
更好的短路能力	优秀的系统可靠性
顶部散热封装 : TSPAK	更高的功率密度



eSiC MOSFET 的新封装

TSPAK 封装

适用于汽车应用的顶部散热封装



	绝缘式设计 (DBC形式)	非绝缘式设计 (LF形式)
封装		
特征	<ul style="list-style-type: none"> • PMS专利 • 绝缘衬底/高介电强度: 易于使用导热脂进行热组装 • 设计灵活性: 更好的热性能 比竞品更长的爬电距离 (5.23mm) • 与竞品P2P 替换 	<ul style="list-style-type: none"> • PMS专利 • 更低的封装成本 • 高好的散热效果 • 比DBC版本更大的可附着芯片尺寸 • 爬电距离 (4.85mm) • 与竞品P2P 替换
优势	<ul style="list-style-type: none"> • 通过粗线键合实现高电流能力 • 高功率密度: 更小的FOM系数 • 更方便的后期维护 • 改善EMI且易于设计 	<ul style="list-style-type: none"> • 通过粗线键合实现高电流能力 • 高功率密度: 更小的FOM系数 • 改善EMI且易于设计 • 比DBC版本更有竞争力的封装成本

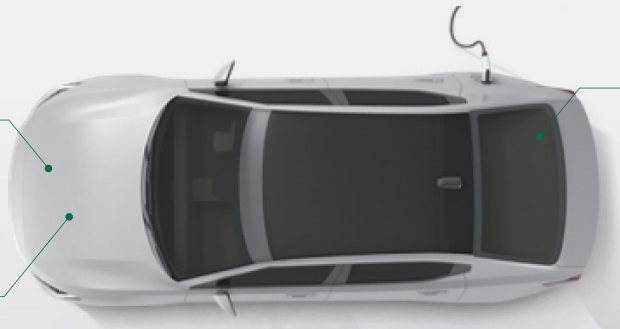
目标应用



电子压缩机
Motor Drive



HV-LV DC-DC
DC-DC



车载充电模块
PFC / DC-DC



TSPAK 封装解决方案 : 1200V Gen2 eSiC MOSFET (汽车级)

PACKAGE	TSPAK-DBC	TSPAK-LF
$R_{DS(ON)_{max}}$		
21mΩ	PCRZ120N21M2A	PCR120N21M2A
40mΩ	PCRZ120N40M2A	PCR120N40M2A
65mΩ	PCRZ120N65M2A	PCR120N65M2A

650V / 1200V / 1700V eSiC 二极管

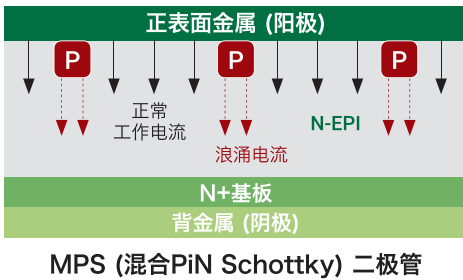
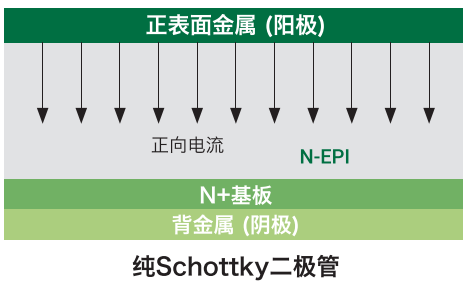
关键特征

- 低导通压降
- 高抗浪涌能力
- 无反向恢复电流
- 最高175°C结温

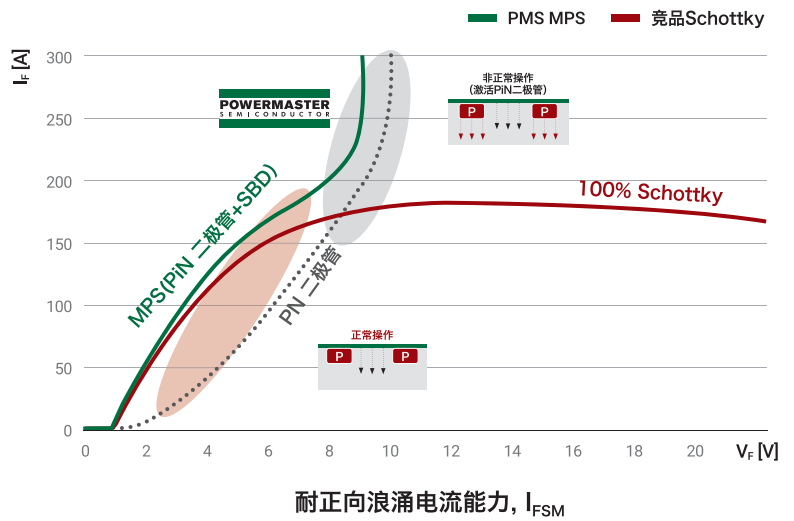
主要优点

- 低导通损耗
- 高耐用性
- 显著降低MOSFET或IGBT导通损耗
- 降低高温时功率损耗

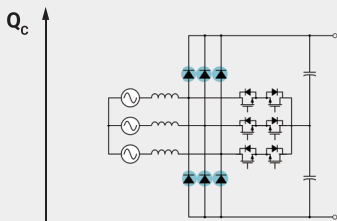
MPS (混合PiN Schottky) 技术



MPS技术提高抗浪涌电流能力



低 V_F 版本和低 Q_C 版本的目标应用

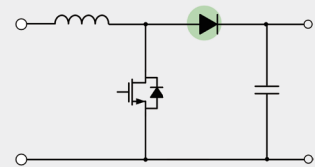


eSiC 低 V_F 版本

- 适用于低频应用 (如:整流电路)
- PCH65S16D1 ($V_F=1.3V$ / $Q_C=61nC$)
- PCW120D40D1 ($V_F=1.39V$ / $Q_C=121nC$)

eSiC 低 Q_C 版本

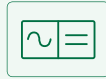
- 适用于高频应用 (如:PFC电路)
- PCH65S16D1Q ($V_F=1.4V$ / $Q_C=47nC$)
- PCW120D40D1Q ($V_F=1.54V$ / $Q_C=92nC$)



600V / 650V eMOS SJ MOSFET

eMOS E7 - PFC (硬开关)

- 更平衡能效和易于使用的性能
- 低EMI噪声, 优化栅极和漏极振铃
- 坚固耐用的体二极管
- 内部 R_G 和优化电容



eMOS UF7 - LLC / ZVS (DC-DC, 软开关)

- 出色的体二极管性能
- 较小 Q_{RR} , 适用于较低尖峰
- 更出色的系统可靠性
- 降低 E_{DYN}



PFC (硬开关)



eMOS E7 优化Pillar 电荷平衡

硬/软开关拓扑

- 更平衡能效和易于使用的性能
- 低EMI噪声, 优化栅极和漏极振铃
- 坚固耐用的体二极管
- 内部 R_G 和优化电容
- 典型 $V_{TH} = 3.5V$

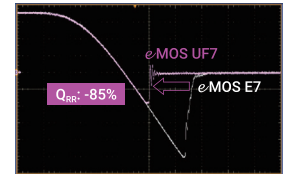
LLC / ZVS (DC-DC)(软开关)



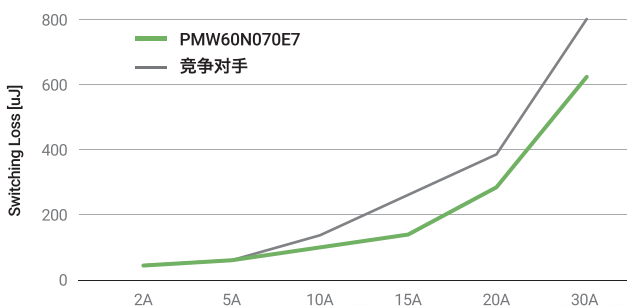
eMOS UF7 控制载流子寿命

软开关拓扑

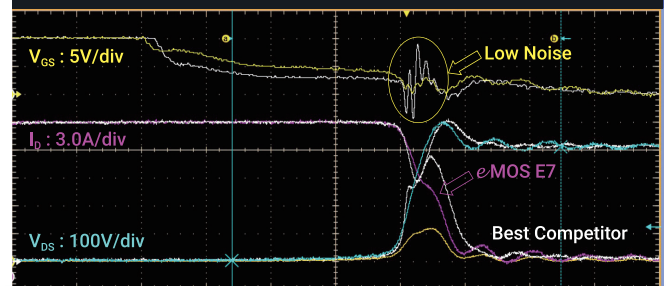
- 可靠耐用的二极管
- 较小 Q_{RR} , 适用于较低尖峰
- 更出色的系统可靠性
- 降低 E_{DYN}
- 典型 $V_{TH} = 4V$



与最佳竞争对手相比拥有较低的开关损耗和较低的开关噪声



PMW60N070E7 (彩色) vs. 竞争对手 (白色)



150V / 200V eMOS 沟槽 MOSFET

关键特性

- 减少开关和导通损耗
- 增强的体二极管dv/dt能力
- 强大的抗雪崩能力
- 无铅、无卤素且符合RoHS标准

主要优点

- 系统效率提升
- 更高的系统可靠性
- 更高运行频率
- 提高功率密度

目标应用



650V / 1200V / 1700V *e*SiC MOSFET 产品



650V / 1200V / 1700V Gen1 *e*SiC MOSFET (工业级)

Voltage	Package	Bare Die	TOLL	D2PAK-7L	TO-247-3L	TO-247-4L	TO-247-4L Notch
	$R_{DS(ON),typ}$						
650V	12mΩ	PCO65N12M1	PCT65N12M1	PCBF65N12M1	PCW65N12M1	PCZ65N12M1	
	15mΩ	PCO65N15M1	PCT65N15M1	PCBF65N15M1	PCW65N15M1	PCZ65N15M1	
	22mΩ	PCO65N22M1	PCT65N22M1				
	27mΩ	PCO65N27M1	PCT65N27M1	PCBF65N27M1	PCW65N27M1	PCZ65N27M1	
	39mΩ	PCO65N39M1	PCT65N39M1				
	45mΩ	PCO65N45M1	PCT65N45M1	PCBF65N45M1	PCW65N45M1	PCZ65N45M1	
1200V	21mΩ	PCO120N21M1			PCW120N21M1	PCZ120N21M1	
	40mΩ	PCO120N40M1		PCBF120N40M1	PCW120N40M1	PCZ120N40M1	
	80mΩ	PCO120N80M1		PCBF120N80M1	PCW120N80M1	PCZ120N80M1	
1700V	24mΩ	PCO170N24M1			PCW170N24M1		PCZN170N24M1
	40mΩ	PCO170N40M1		PCBF170N40M1	PCW170N40M1		PCZN170N40M1
	1000mΩ	PCO170N1K0M1		PCBF170N1K0M1	PCW170N1K0M1		

1200V Gen1 *e*SiC MOSFET (汽车级)

Voltage	Package	Bare Die	D2PAK-7L	TO-247-3L	TO-247-4L
	$R_{DS(ON),typ}$				
1200V	21mΩ	PCO120N21M1A		PCW120N21M1A	PCZ120N21M1A
	40mΩ	PCO120N40M1A			PCZ120N40M1A
	80mΩ	PCO120N80M1A	PCBF120N80M1A		PCZ120N80M1A



1200V Gen2 eSiC MOSFET (工业级) New

Voltage	Package $R_{DS(ON),typ}$	Bare Die	D2PAK-7L	TO-247-3L	TO-247-4L	TO-247-4L Notch
1200V	16mΩ	PCO120N16M2	PCBF120N16M2	PCW120N16M2	PCZ120N16M2	PCZN120N16M2
	21mΩ	PCO120N21M2	PCBF120N21M2	PCW120N21M2	PCZ120N21M2	PCZN120N21M2
	31mΩ	PCO120N31M2	PCBF120N31M2	PCW120N31M2	PCZ120N31M2	PCZN120N31M2
	40mΩ	PCO120N40M2	PCBF120N40M2	PCW120N40M2	PCZ120N40M2	PCZN120N40M2
	65mΩ	PCO120N65M2	PCBF120N65M2	PCW120N65M2	PCZ120N65M2	PCZN120N65M2
	80mΩ	PCO120N80M2	PCBF120N80M2	PCW120N80M2	PCZ120N80M2	PCZN120N80M2

1200V Gen2 eSiC MOSFET (汽车级) New

Voltage	Package $R_{DS(ON),typ}$	Bare Die	TO-247-4L	TO-247-4L Notch	TSPAK-DBC	TSPAK-LF
1200V	16mΩ	PCO120N16M2A	PCZ120N16M2A	PCZN120N16M2A		
	21mΩ	PCO120N21M2A		PCZN120N21M2A	PCRZ120N21M2A	PCR120N21M2A
	40mΩ	PCO120N40M2A		PCZN120N40M2A	PCRZ120N40M2A	PCR120N40M2A
	65mΩ	PCO120N65M2A		PCZN120N65M2A	PCRZ120N65M2A	PCR120N65M2A

650V / 1200V / 1700V *e*SiC 二极管产品



650V *e*SiC 二极管 (工业级) - 适用于低开关频率应用的低 V_F 版本

Package	Bare Die	DPAK	D2PAK	TO-220F-2L	TO-220-2L	TO-247-2L	TO-247-3L
I_F							
40A							PCW65D40D1
30A							PCW65D30D1
20A	PCO65S20D1		PCB65S20D1	PCF65S20D1	PCH65S20D1	PCA65S20D1	PCW65D20D1
16A	PCO65S16D1				PCH65S16D1		PCW65D16D1
12A	PCO65S12D1			PCF65S12D1	PCH65S12D1		
10A	PCO65S10D1	PCD65S10D1	PCB65S10D1	PCF65S10D1	PCH65S10D1		
8A	PCO65S08D1		PCB65S08D1	PCF65S08D1	PCH65S08D1		
6A	PCO65S06D1			PCF65S06D1	PCH65S06D1		
4A	PCO65S04D1			PCF65S04D1	PCH65S04D1		

650V *e*SiC 二极管 (工业级) - 适用于高开关频率应用的低 Q_C 版本

Package	Bare Die	DPAK	D2PAK	TO-220F-2L	TO-220-2L	TO-247-2L	TO-247-3L
I_F							
50A						PCA65D50D1Q	
40A							PCW65D40D1Q
30A						PCA65S30D1Q	PCW65D30D1Q
20A	PCO65S20D1Q		PCB65S20D1Q	PCF65S20D1Q	PCH65S20D1Q	PCA65S20D1Q	PCW65D20D1Q
16A	PCO65S16D1Q				PCH65S16D1Q		PCW65D16D1Q
12A	PCO65S12D1Q		PCB65S12D1Q	PCF65S12D1Q	PCH65S12D1Q		
10A	PCO65S10D1Q			PCF65S10D1Q	PCH65S10D1Q		
8A	PCO65S08D1Q			PCF65S08D1Q	PCH65S08D1Q		
6A	PCO65S06D1Q			PCF65S06D1Q	PCH65S06D1Q		



1200V *e*-SiC 二极管 (工业级)

Package / I_F	Bare Die	D2PAK	TO-220-2L	TO-247-2L	TO-247-3L
60A				PCA120S60D1Q	PCW120D60D1Q
40A	PCO120S40D1			PCA120S40D1	PCW120D40D1 / D1Q
30A	PCO120S30D1			PCA120S30D1 / D1Q	PCW120D30D1
20A	PCO120S20D1	PCB120S20D1	PCH120S20D1	PCA120S20D1	PCW120D20D1
15A	PCO120S15D1		PCH120S15D1	PCA120S15D1	PCW120D15D1
10A	PCO120S10D1	PCB120S10D1	PCH120S10D1	PCA120S10D1	PCW120D10D1
8A	PCO120S08D1		PCH120S08D1		
5A	PCO120S05D1		PCH120S05D1		

1700V *e*-SiC 二极管 (工业级)

Package / I_F	Bare Die	TO-247-2L
25A	PCO170S25D1	PCA170S25D1
10A	PCO170S10D1	PCA170S10D1

1200V *e*-SiC 二极管 (汽车级) New

Package / I_F	TO-247-2L	TO-247-3L
40A	PCO120S40D1A	PCW120D40D1A / D1QA
30A	PCO120S30D1A / D1QA	PCW120D30D1A
20A	PCO120S20D1A	PCW120D20D1A
15A	PCO120S15D1A	PCW120D15D1A
10A	PCO120S10D1A	PCW120D10D1A

600V / 650V *e*MOS E7 / UF7 产品



600V *e*MOS E7 MOSFET

Package	Die	DPAK	PQFN88	TOLL	TO-220	TO-220F	TO-247-3L	TO-247-4L
$R_{DS(ON)_{max}}$								
28mΩ	PMO60N028E7						PMW60N028E7	PMZ60N028E7
40mΩ	PMO60N040E7						PMW60N040E7	
70mΩ	PMO60N070E7						PMW60N070E7	
99mΩ	PMO60N099E7				PMP60N099E7	PMF60N099E7	PMW60N099E7	
105mΩ			PML60N105E7	PMT60N105E7				
180mΩ	PMO60N180E7				PMP60N180E7	PMF60N180E7		
280mΩ	PMO60N280E7	PMD60N280E7			PMP60N280E7	PMF60N280E7		
380mΩ	PMO60N380E7	PMD60N380E7			PMP60N380E7	PMF60N380E7		
600mΩ	PMO60N600E7	PMD60N600E7				PMF60N600E7		

650V *e*MOS E7 MOSFET

Package	Die	TO-220F
$R_{DS(ON)_{max}}$		
180mΩ	PMO65N180E7	PMF65N180E7
280mΩ	PMO65N280E7	PMF65N280E7
380mΩ	PMO65N380E7	PMF65N380E7
600mΩ	PMO65N600E7	PMF65N600E7
1200mΩ	PMO65N12KE7	



600V *e*MOS UF7 MOSFET

Package / $R_{DS(ON)_{max}}$	Die	TO-220F	TO-247-3L
30mΩ	PMO60N030UF7		PMW60N030UF7
43mΩ	PMO60N043UF7		PMW60N043UF7
75mΩ	PMO60N075UF7		PMW60N075UF7
105mΩ	PMO60N105UF7		PMW60N105UF7
193mΩ	PMO60N193UF7	PMF60N193UF7	

650V *e*MOS UF7 MOSFET

Package / $R_{DS(ON)_{max}}$	Die	TO-247-3L
45mΩ	PMO65N045UF7	PMW65N045UF7
310mΩ	PMO65N310UF7	
645mΩ	PMO65N645UF7	

150V / 200V *e*MOS Trench MOSFET



150V / 200V *e*MOS 沟槽 MOSFET

Voltage	Package	Die	TO-247-3L
150V	5.9mΩ	PSO15N5P9G1	PSW15N5P9G1
200V	9.7mΩ	PSO20N9P7G1	PSW20N9P7G1

命名规则

eSiC MOSFET

P C Z 120 N 21 M1 A

- MOSFET / 产品等级
 - A : 汽车级
 - None : 工业级
- MOSFET / 版本
 - M1 : 第一代 / M2 : 第二代 / M3 : 第三代
- $R_{DS(ON)}$ 典型值
- 沟道极性
- 电压等级
- 封装
 - BF : D2PAK-7L
 - T : TOLL
 - P : TO-220-3L
 - W : TO-247-3L
 - Z : TO-247-4L
 - ZN : TO-247-4L Notch
 - R : TSPAK-LF
 - RZ : TSPAK-DBC
 - O : 晶圆 (未锯切)
 - OS : 晶圆 (锯切)
- SiC
- Power Master 半导体

eSiC 二极管

P C P 120 S 20 D1(Q) A

- 二极管 / 产品等级
 - A : 汽车级
 - None : 工业级
- 二极管 / 版本
 - D1 : 第一代 (低 V_F)
 - D1Q : 第一代 (低 Q_C)
- 电流 [A]
- S : 单芯片 / D : 多芯片
- 电压等级
- 封装
 - B : D2PAK
 - H : TO-220-2L
 - P : TO-220-3L
 - L : PQFN88
 - D : DPAK (Center Lead Type)
 - M : DPAK (No Center Lead Type)
 - W : TO-247-3L
 - A : TO-247-2L
 - O : 晶圆 (未锯切)
 - OS : 晶圆 (锯切)
- SiC
- Power Master 半导体

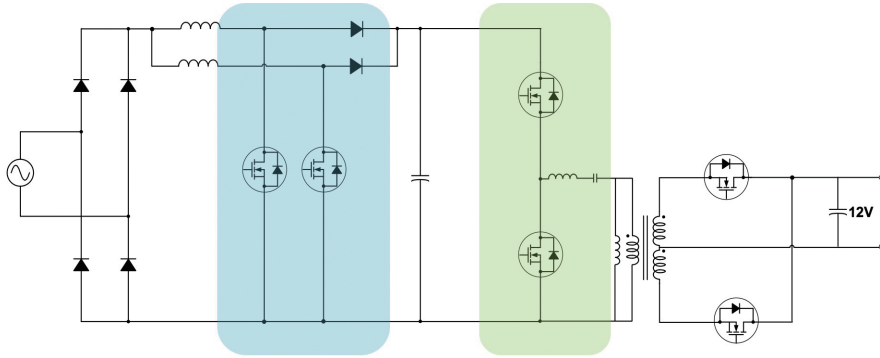
eMOS SJ MOSFET

P M P 60 N 180 E 7 Z A

- MOSFET / 产品等级
 - A : 汽车级
 - None : 工业级
- 稳压二极管
- 版本
- 开关特性
 - E : 高效
 - F : FRFET
 - UF : Ultra FRFET
 - H : 高效率
- $R_{DS(ON)}$ 最大值
- 沟道极性
- 电压等级
- 封装
 - B : D2PAK
 - D : DPAK
 - E : ISOTOP
 - F : TO-220F-3L
 - FN : Narrow lead
 - FW : Wide pitch
 - I : I2PAK
 - L : PQFN88
 - N : SOT-223
 - P : TO-220-3L
 - T : TOLL
 - U : IPAK
 - W : TO-247-3L
 - Z : TO-247-4L
 - S : PQFN56
 - O : 晶圆 (未锯切)
 - OS : 晶圆 (锯切)
- 超结 MOSFET
- Power Master 半导体

服务器电源

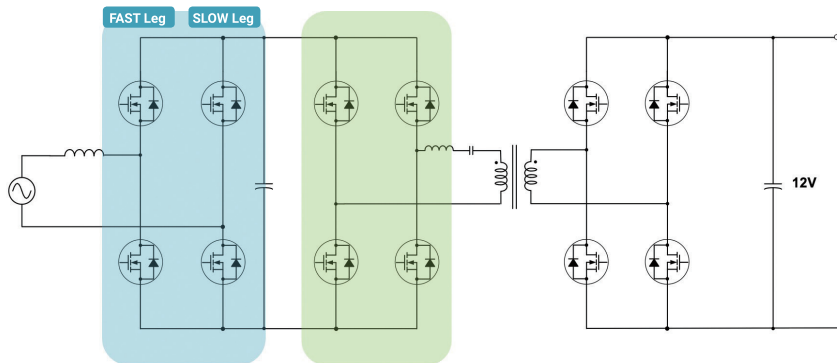
服务器电源应用解决方案(<1.6KW)



交错式CCM PFC - 推荐产品		
eMOS E7	PMW60N099E7	600V / 99mΩ, TO-247-3L
	PML60N105E7	600V / 105mΩ, PQFN88
	PMP60N180E7	600V / 180mΩ, TO-220
eSiC Diode	PCH65S06D1Q	650V / 6A, TO-220-2L
	PCH65S08D1Q	650V / 8A, TO-220-2L

LLC或ZVS PSFB - 推荐产品		
eMOS UF7	PMW60N075UF7	600V / 75mΩ, TO-247-3L
	PMW60N105UF7	600V / 105mΩ, TO-247-3L

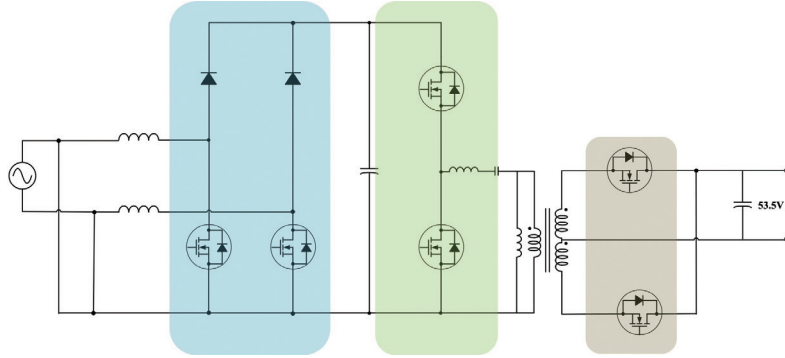
超大规模云或AI服务器电源应用解决方案(>1.6KW)



图腾柱PFC - 推荐产品		
eSiC MOSFET (FAST Leg)	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCT65N12M1	650V / 12mΩ, TOLL
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCT65N15M1	650V / 15mΩ, TOLL
	PCT65N22M1	650V / 22mΩ, TOLL
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCT65N27M1	650V / 27mΩ, TOLL
	PCT65N39M1	650V / 39mΩ, TOLL
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
	PCT65N45M1	650V / 45mΩ, TOLL
	eMOS E7 / UF7 (SLOW Leg)	PMW60N028E7
PMZ60N028E7		600V / 28mΩ, TO-247-4L
PMW60N040E7		600V / 40mΩ, TO-247-3L
PMW60N030UF7		600V / 43mΩ, TO-247-3L
PMW60N043UF7		600V / 30mΩ, TO-247-3L
PMW65N043UF7		650V / 43mΩ, TO-247-3L

LLC或ZVS PSFB - 推荐产品		
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCT65N12M1	650V / 12mΩ, TOLL
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCT65N15M1	650V / 15mΩ, TOLL
	PCT65N22M1	650V / 22mΩ, TOLL
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCT65N27M1	650V / 27mΩ, TOLL
	PCT65N39M1	650V / 39mΩ, TOLL
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
	PCT65N45M1	650V / 45mΩ, TOLL
	eMOS UF7	PMW60N030UF7
PMW60N043UF7		600V / 43mΩ, TO-247-3L
PMW65N043UF7		650V / 43mΩ, TO-247-3L
PMW60N075UF7		600V / 75mΩ, TO-247-3L

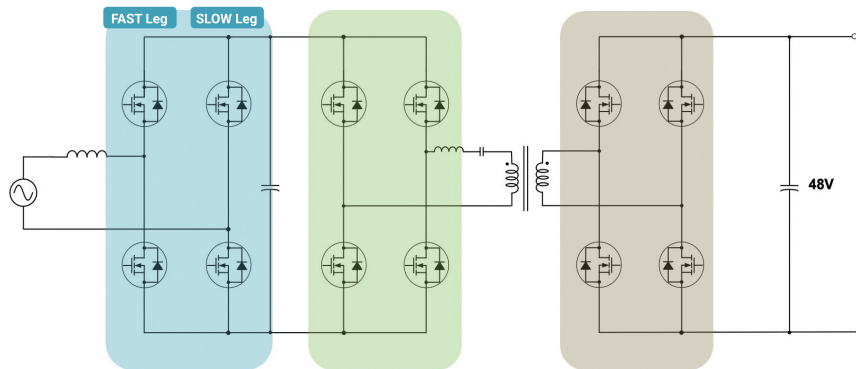
通讯电源应用解决方案



双升压无桥PFC - 推荐产品		
eMOS E7	PMW60N099E7	600V / 99mΩ, TO-247-3L
	PML60N105E7	600V / 105mΩ, PQFN88
	PMP60N180E7	600V / 180mΩ, TO-220-3L
eSiC Diode	PCH65S06D1Q	650V / 6A, TO-220-2L
	PCH65S08D1Q	650V / 8A, TO-220-2L

LLC - 推荐产品		
eMOS UF7	PMW60N075UF7	600V / 75mΩ, TO-247-3L
	PMW60N105UF7	600V / 105mΩ, TO-247-3L

同步整流 - 推荐产品		
150V eMOS	PSW15N5P9G1	150V / 5.9mΩ, TO-247-3L
		200V / 9.7mΩ, TO-247-3L
200V eMOS	PSW20N9P7G1	200V / 9.7mΩ, TO-247-3L



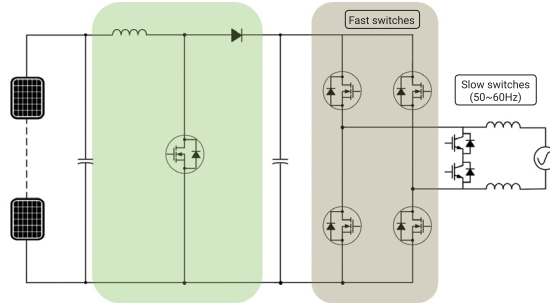
图腾柱PFC - 推荐产品		
eSiC MOSFET (FAST Leg)	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCT65N12M1	650V / 12mΩ, TOLL
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCT65N15M1	650V / 15mΩ, TOLL
	PCT65N22M1	650V / 22mΩ, TOLL
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCT65N27M1	650V / 27mΩ, TOLL
	PCT65N39M1	650V / 39mΩ, TOLL
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
	PCT65N45M1	650V / 45mΩ, TOLL
	eMOS E7 / UF7 (SLOW Leg)	PMW60N028E7
PMZ60N028E7		600V / 28mΩ, TO-247-4L
PMW60N040E7		600V / 40mΩ, TO-247-3L
PMW60N030UF7		600V / 43mΩ, TO-247-3L
PMW60N043UF7		600V / 30mΩ, TO-247-3L
PMW65N043UF7		650V / 43mΩ, TO-247-3L

LLC或ZVS PSFB - 推荐产品		
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCT65N12M1	650V / 12mΩ, TOLL
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCT65N15M1	650V / 15mΩ, TOLL
	PCT65N22M1	650V / 22mΩ, TOLL
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCT65N27M1	650V / 27mΩ, TOLL
	PCT65N39M1	650V / 39mΩ, TOLL
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
	PCT65N45M1	650V / 45mΩ, TOLL
	eMOS UF7	PMW60N030UF7
PMW60N043UF7		600V / 43mΩ, TO-247-3L
PMW65N043UF7		650V / 43mΩ, TO-247-3L
PMW60N075UF7		600V / 75mΩ, TO-247-3L

同步整流 - 推荐产品		
150V eMOS	PSW15N5P9G1	150V / 5.9mΩ, TO-247
		200V / 9.7mΩ, TO-247
200V eMOS	PSW20N9P7G1	200V / 9.7mΩ, TO-247

住宅光伏逆变器

单相串型逆变器应用解决方案

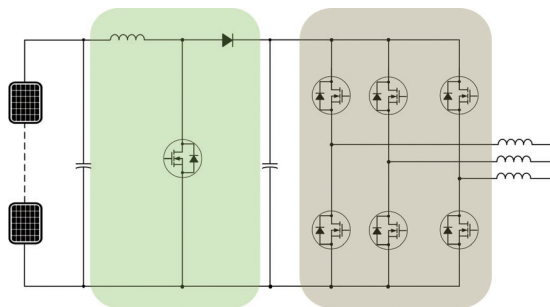


HERIC Inverter

DC-DC MPPT - Boost - 推荐产品		
eMOS E7 / UF7	PMW60N028E7	600V / 28mΩ, TO-247-3L
	PMZ60N028E7	600V / 28mΩ, TO-247-4L
	PMW60N040E7	600V / 40mΩ, TO-247-3L
	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
eSiC MOSFET	PMW65N043UF7	650V / 43mΩ, TO-247-3L
	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
eSiC Diode	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCW65N45M1	650V / 45mΩ, TO-247-3L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
	PCA65S20D1	650V / 20A, TO-247-2L
	PCA65S20D1Q	650V / 20A, TO-247-2L
	PCW65D30D1	650V / 30A, TO-247-3L
PCW65D30D1Q	650V / 30A, TO-247-3L	

DC-AC HERIC 逆变器 - 推荐产品		
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
eMOS UF7	PCW65N45M1	650V / 45mΩ, TO-247-3L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
PMW65N043UF7	650V / 43mΩ, TO-247-3L	
PMW60N075UF7	600V / 75mΩ, TO-247-3L	

三相串型逆变器应用解决方案

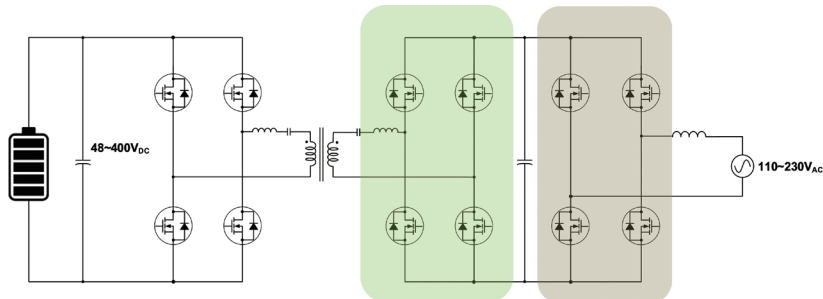


2 Level Inverter

DC-DC MPPT - Boost - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1	1200V / 80mΩ, TO-247-3(4)L
	PCW(Z)120N16M2	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2	1200V / 65mΩ, TO-247-3(4)L
eSiC Diode	PCA120S15D1	1200V / 15A, TO-247-2L
	PCW65D16D1Q	650V / 16A, TO-247-3L
	PCA120S20D1	1200V / 20A, TO-247-2L
	PCA65S20D1Q	650V / 20A, TO-247-2L
	PCA120S30D1	1200V / 30A, TO-247-2L
	PCA120S30D1Q	1200V / 30A, TO-247-2L
	PCA120S40D1	1200V / 40A, TO-247-2L
	PCA120S40D1	1200V / 40A, TO-247-2L

DC-AC 两电平逆变器 - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1	1200V / 80mΩ, TO-247-3(4)L
	PCW(Z)120N16M2	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2	1200V / 65mΩ, TO-247-3(4)L

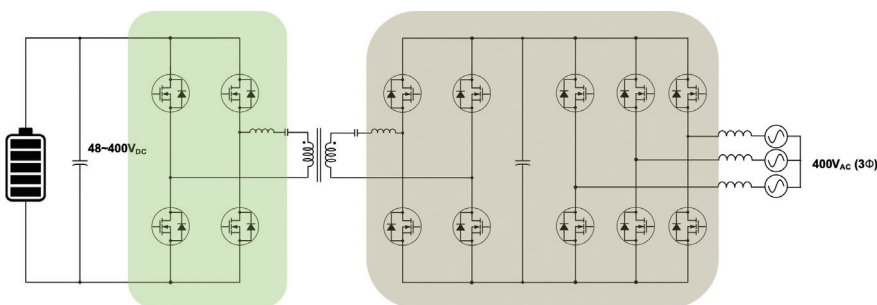
ESS电源转换系统(PSC)应用解决方案 (1Φ)



DC-DC CLLC 副边 - 推荐产品		
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCW65N45M1	650V / 45mΩ, TO-247-3L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
eMOS UF7	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
	PMW65N043UF7	650V / 43mΩ, TO-247-3L
	PMW60N075UF7	600V / 75mΩ, TO-247-3L

DC-AC 图腾柱 - 推荐产品		
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCW65N45M1	650V / 45mΩ, TO-247-3L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
eMOS UF7	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
	PMW65N043UF7	650V / 43mΩ, TO-247-3L
	PMW60N075UF7	600V / 75mΩ, TO-247-3L

ESS电源转换系统(PSC)应用解决方案 (3Φ)

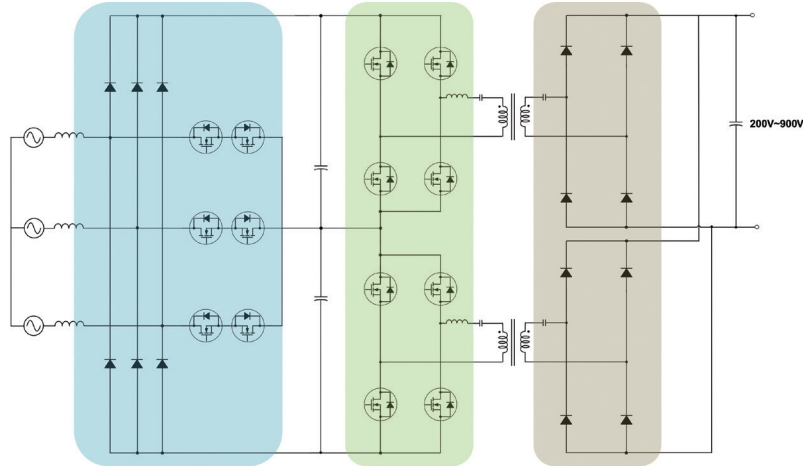


DC-DC CLLC 副边 - 推荐产品		
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCBF65N12M1	650V / 12mΩ, D2PAK-7L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCBF65N15M1	650V / 15mΩ, D2PAK-7L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCBF65N27M1	650V / 27mΩ, D2PAK-7L
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCW65N45M1	650V / 45mΩ, TO-247-3L
	PCBF65N45M1	650V / 45mΩ, D2PAK-7L
eMOS UF7	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
	PMW65N043UF7	650V / 43mΩ, TO-247-3L
	PMW60N075UF7	600V / 75mΩ, TO-247-3L

DC-AC 三相全桥(B6) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1	1200V / 80mΩ, TO-247-3(4)L
	PCW(Z)120N16M2	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2	1200V / 65mΩ, TO-247-3(4)L

直流充电桩

直流充电桩应用解决方案 (<=30KW)

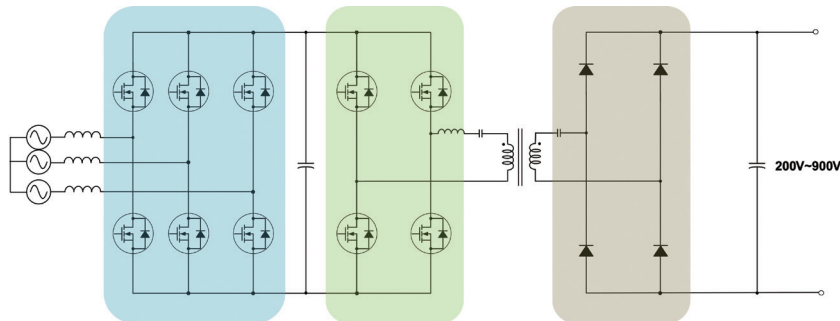


维也纳整流 - 推荐产品		
eMOS E7	PMW60N028E7	600V / 28mΩ, TO-247-3L
	PMZ60N028E7	600V / 28mΩ, TO-247-4L
	PMW60N040E7	600V / 40mΩ, TO-247-3L
	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
	PMW65N043UF7	650V / 43mΩ, TO-247-3L
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCW65N45M1	650V / 45mΩ, TO-247-3L
eSiC Diode	PCA120S(D)20D1	1200V / 20A, TO-247-2/3L
	PCA120S(D)30D1	1200V / 30A, TO-247-2/3L
	PCA120S(D)40D1	1200V / 40A, TO-247-2/3L

全桥 LLC (源边) - 推荐产品		
eMOS UF7	PMW60N030UF7	600V / 30mΩ, TO-247-3L
	PMW60N043UF7	600V / 43mΩ, TO-247-3L
	PMW65N043UF7	650V / 43mΩ, TO-247-3L
	PMW60N075UF7	600V / 75mΩ, TO-247-3L
eSiC MOSFET	PCZ65N12M1	650V / 12mΩ, TO-247-4L
	PCW65N12M1	650V / 12mΩ, TO-247-3L
	PCZ65N15M1	650V / 15mΩ, TO-247-4L
	PCW65N15M1	650V / 15mΩ, TO-247-3L
	PCZ65N27M1	650V / 27mΩ, TO-247-4L
	PCW65N27M1	650V / 27mΩ, TO-247-3L
	PCZ65N45M1	650V / 45mΩ, TO-247-4L
	PCW65N45M1	650V / 45mΩ, TO-247-3L

全桥 LLC (副边) - 推荐产品		
eSiC Diode	PCA120S20D1	1200V / 20A, TO-247-2L
	PCA120S30D1	1200V / 30A, TO-247-2L
	PCA120S40D1	1200V / 40A, TO-247-2L
	PCW120D20D1	1200V / 20A, TO-247-3L
	PCW120D30D1	1200V / 30A, TO-247-3L
	PCW120D40D1	1200V / 40A, TO-247-3L

直流充电桩应用解决方案 (= > 30KW)



三相全桥整流(B6) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1	1200V / 80mΩ, TO-247-3(4)L
	PCW(Z)120N16M2	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2	1200V / 65mΩ, TO-247-3(4)L

全桥 LLC (源边) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1	1200V / 80mΩ, TO-247-3(4)L
	PCW(Z)120N16M2	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2	1200V / 65mΩ, TO-247-3(4)L

全桥 LLC (副边) - 推荐产品		
eSiC Diode	PCA120S20D1	1200V / 20A, TO-247-2L
	PCA120S30D1	1200V / 30A, TO-247-2L
	PCA120S40D1	1200V / 40A, TO-247-2L
	PCW120D20D1	1200V / 20A, TO-247-3L
	PCW120D30D1	1200V / 30A, TO-247-3L
	PCW120D40D1	1200V / 40A, TO-247-3L

SiC MOSFETs for Automotive Block

1200V 650 / 750V



E-Compressor

31mΩ	27mΩ
40mΩ	
60mΩ	
80mΩ	45mΩ

- 650V/1200V SiC MOS
- IGBT → SiC for higher eff. & smaller form factor
- Top side cooling SMD Package



HV-LV DC-DC

80mΩ	
120mΩ	140mΩ
160mΩ	

- 400/800V_{dc}(HV Batt.) to 12/48V_{dc}(LV Batt.)
- SiC MOSFET for smaller form factor
- Standardization/Integration(OBC+DC-DC)



Onboard Charger(OBC)

10mΩ	15mΩ
16mΩ	
21mΩ	
31mΩ	27mΩ
40mΩ	
65mΩ	45mΩ
80mΩ	

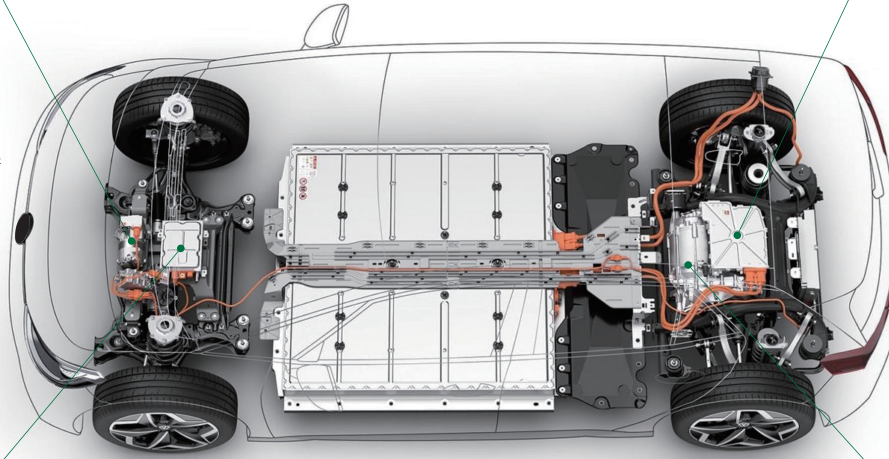
- 110~230V_{AC} (1Φ or 3Φ) to 400~800VDC
- Power limited (22kW) by cost / size
- Bi-directional Operation (V2V / V2G / V2L)



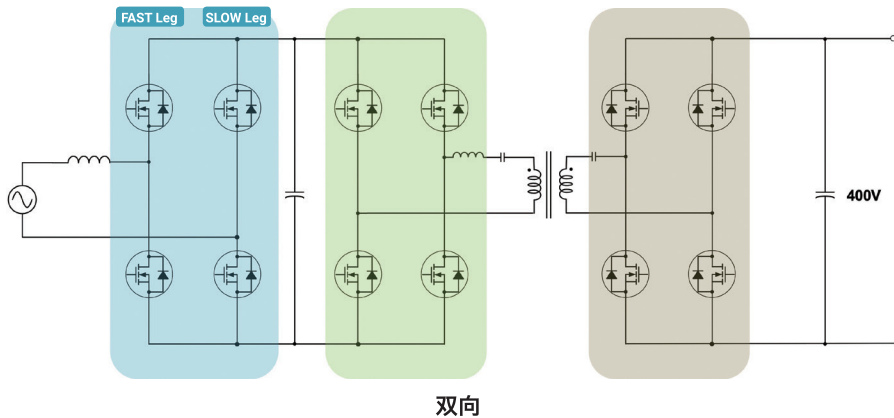
Main Inverter

3mΩ	3mΩ
6mΩ	6mΩ
8mΩ	8mΩ

- 800V into 3-phase AC up to 200kW for e-motor
- IGBT → SiC for higher eff. & smaller form factor
- Hybrid module solution



OBC应用解决方案 (单相 / 400V 电池平台)



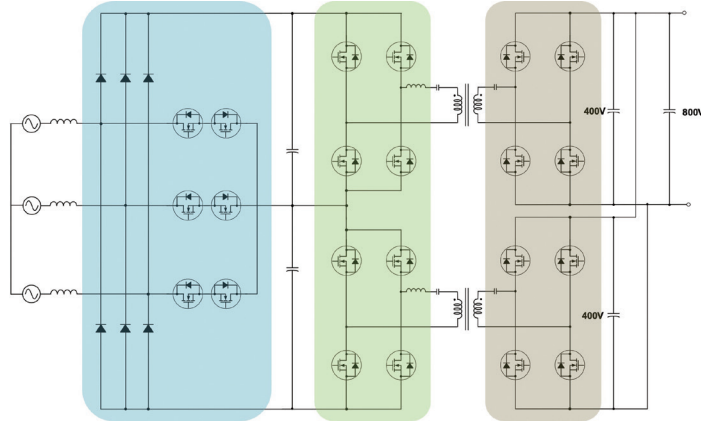
图腾柱PFC - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

CLLC (源边) - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

CLLC (副边) - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

车载充电器 (OBC)

OBC应用解决方案 (三相 / 800V电池平台)



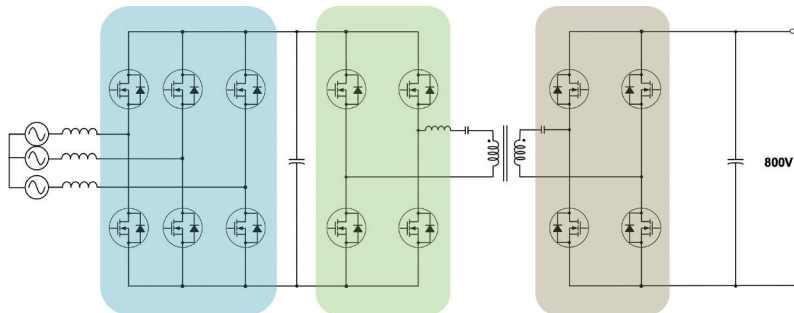
单向

维也纳整流 - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 15mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L
eSiC Diode	PCA120S15D1A	1200V / 15A, TO-247-2L
	PCA120S20D1A	1200V / 20A, TO-247-2L
	PCA120S30D1A	1200V / 30A, TO-247-2L
	PCA120S40D1A	1200V / 40A, TO-247-2L

CLLC (源边) - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 15mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

CLLC (副边) - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 15mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

OBC应用解决方案 (三相 / 800V电池平台)



双向

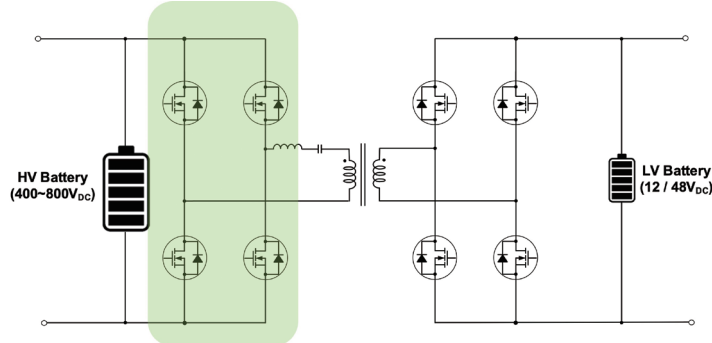
三相全桥整流(B6) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1A	1200V / 80mΩ, TO-247-3(4)L
	PCBF120N21M1A	1200V / 21mΩ, D2PAK-7L
	PCBF120N40M1A	1200V / 40mΩ, D2PAK-7L
	PCBF120N80M1A	1200V / 80mΩ, D2PAK-7L
	PCW(Z)120N16M2A	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2A	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2A	1200V / 65mΩ, TO-247-3(4)L
	PCBF120N16M2A	1200V / 16mΩ, D2PAK-7L
	PCBF120N21M2A	1200V / 21mΩ, D2PAK-7L
	PCBF120N31M2A	1200V / 31mΩ, D2PAK-7L
	PCBF120N40M2A	1200V / 40mΩ, D2PAK-7L
	PCBF120N65M2A	1200V / 65mΩ, D2PAK-7L

CLLC (源边) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1A	1200V / 80mΩ, TO-247-3(4)L
	PCBF120N21M1A	1200V / 21mΩ, D2PAK-7L
	PCBF120N40M1A	1200V / 40mΩ, D2PAK-7L
	PCBF120N80M1A	1200V / 80mΩ, D2PAK-7L
	PCW(Z)120N16M2A	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2A	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2A	1200V / 65mΩ, TO-247-3(4)L
	PCBF120N16M2A	1200V / 16mΩ, D2PAK-7L
	PCBF120N21M2A	1200V / 21mΩ, D2PAK-7L
	PCBF120N31M2A	1200V / 31mΩ, D2PAK-7L
	PCBF120N40M2A	1200V / 40mΩ, D2PAK-7L
	PCBF120N65M2A	1200V / 65mΩ, D2PAK-7L

CLLC (副边) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1A	1200V / 80mΩ, TO-247-3(4)L
	PCBF120N21M1A	1200V / 21mΩ, D2PAK-7L
	PCBF120N40M1A	1200V / 40mΩ, D2PAK-7L
	PCBF120N80M1A	1200V / 80mΩ, D2PAK-7L
	PCW(Z)120N16M2A	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2A	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2A	1200V / 65mΩ, TO-247-3(4)L
	PCBF120N16M2A	1200V / 16mΩ, D2PAK-7L
	PCBF120N21M2A	1200V / 21mΩ, D2PAK-7L
	PCBF120N31M2A	1200V / 31mΩ, D2PAK-7L
	PCBF120N40M2A	1200V / 40mΩ, D2PAK-7L
	PCBF120N65M2A	1200V / 65mΩ, D2PAK-7L

HV/LV DC-DC & 电动压缩机

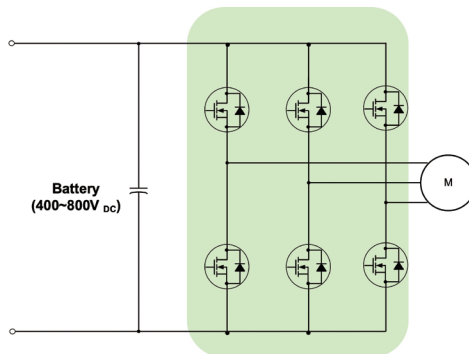
HV/LV DC-DC应用解决方案 (400V~800V)



LLC 源边 (400V _{DC}) - 推荐产品		
eSiC MOSFET	PCZ65N12M1A	650V / 12mΩ, TO-247-4L
	PCZ65N15M1A	650V / 15mΩ, TO-247-4L
	PCZ65N27M1A	650V / 27mΩ, TO-247-4L
	PCZ65N45M1A	650V / 45mΩ, TO-247-4L
	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 15mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

LLC 源边 (800V _{DC}) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1A	1200V / 80mΩ, TO-247-3(4)L
	PCBF120N21M1A	1200V / 21mΩ, D2PAK-7L
	PCBF120N40M1A	1200V / 40mΩ, D2PAK-7L
	PCBF120N80M1A	1200V / 80mΩ, D2PAK-7L
	PCW(Z)120N16M2A	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N31M2A	1200V / 31mΩ, TO-247-3(4)L
	PCW(Z)120N40M2A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2A	1200V / 65mΩ, TO-247-3(4)L
	PCBF120N16M2A	1200V / 16mΩ, D2PAK-7L
	PCBF120N21M2A	1200V / 21mΩ, D2PAK-7L
	PCBF120N31M2A	1200V / 31mΩ, D2PAK-7L
	PCBF120N40M2A	1200V / 40mΩ, D2PAK-7L
	PCBF120N65M2A	1200V / 65mΩ, D2PAK-7L

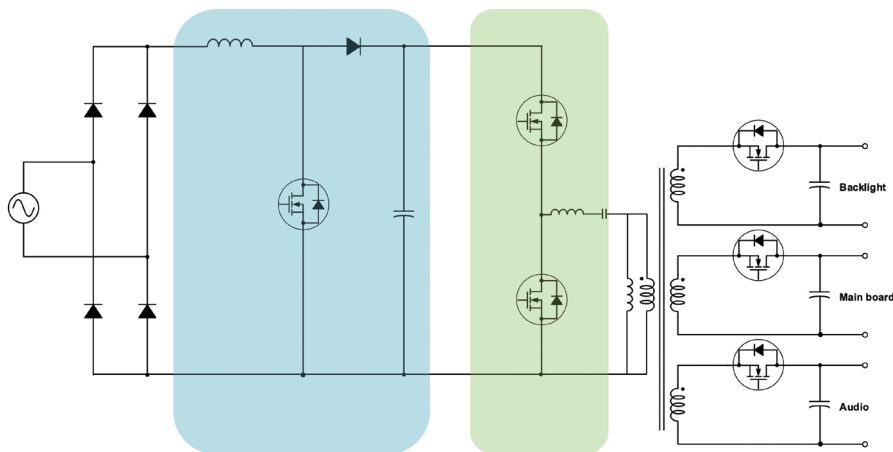
电动压缩机应用解决方案



三相逆变器 (400V _{DC}) - 推荐产品		
eSiC MOSFET	PCBF65N12M1A	650V / 12mΩ, D2PAK-7L
	PCBF65N15M1A	650V / 15mΩ, D2PAK-7L
	PCBF65N27M1A	650V / 27mΩ, D2PAK-7L
	PCBF65N45M1A	650V / 45mΩ, D2PAK-7L

三相逆变器 (800V _{DC}) - 推荐产品		
eSiC MOSFET	PCW(Z)120N21M1A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M1A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N80M1A	1200V / 80mΩ, TO-247-3(4)L
	PCBF120N21M1A	1200V / 21mΩ, D2PAK-7L
	PCBF120N40M1A	1200V / 40mΩ, D2PAK-7L
	PCBF120N80M1A	1200V / 80mΩ, D2PAK-7L
	PCR(Z)120N21M2A	1200V / 21mΩ, TSPAK-LF(DBC)
	PCR(Z)120N40M2A	1200V / 40mΩ, TSPAK-LF(DBC)
	PCR(Z)120N65M2A	1200V / 65mΩ, TSPAK-LF(DBC)
	PCW(Z)120N16M2A	1200V / 16mΩ, TO-247-3(4)L
	PCW(Z)120N21M2A	1200V / 21mΩ, TO-247-3(4)L
	PCW(Z)120N40M2A	1200V / 40mΩ, TO-247-3(4)L
	PCW(Z)120N65M2A	1200V / 65mΩ, TO-247-3(4)L
	PCBF120N16M2A	1200V / 16mΩ, D2PAK-7L
	PCBF120N21M2A	1200V / 21mΩ, D2PAK-7L
	PCBF120N40M2A	1200V / 40mΩ, D2PAK-7L
PCBF120N65M2A	1200V / 65mΩ, D2PAK-7L	

中型尺寸电视电源应用解决方案 (100-300W)



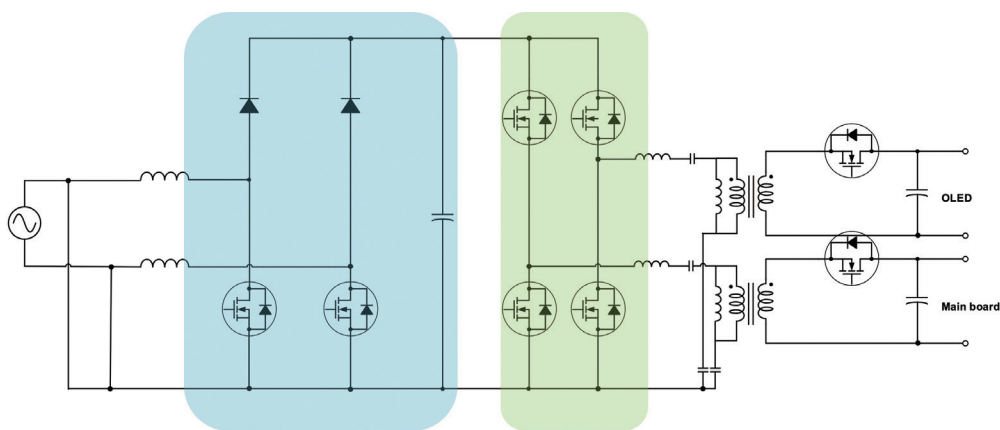
升压PFC - 推荐产品

eMOS E7	PMD60N280E7	600V / 280mΩ, DPAK
	PMD60N380E7	600V / 380mΩ, DPAK
	PMD60N600E7	600V / 600mΩ, DPAK
	PMF60N280E7	600V / 280mΩ, TO-220F-3L
	PMF60N380E7	600V / 380mΩ, TO-220F-3L
	PMF60N600E7	600V / 600mΩ, TO-220F-3L

半桥LLC - 推荐产品

eMOS E7	PMD60N280E7	600V / 280mΩ, DPAK
	PMD60N380E7	600V / 380mΩ, DPAK
	PMD60N600E7	600V / 600mΩ, DPAK
	PMF60N280E7	600V / 280mΩ, TO-220F-3L
	PMF60N380E7	600V / 380mΩ, TO-220F-3L
	PMF60N600E7	600V / 600mΩ, TO-220F-3L

中型尺寸电视电源应用解决方案 (300-600W)



双升压无桥PFC - 推荐产品

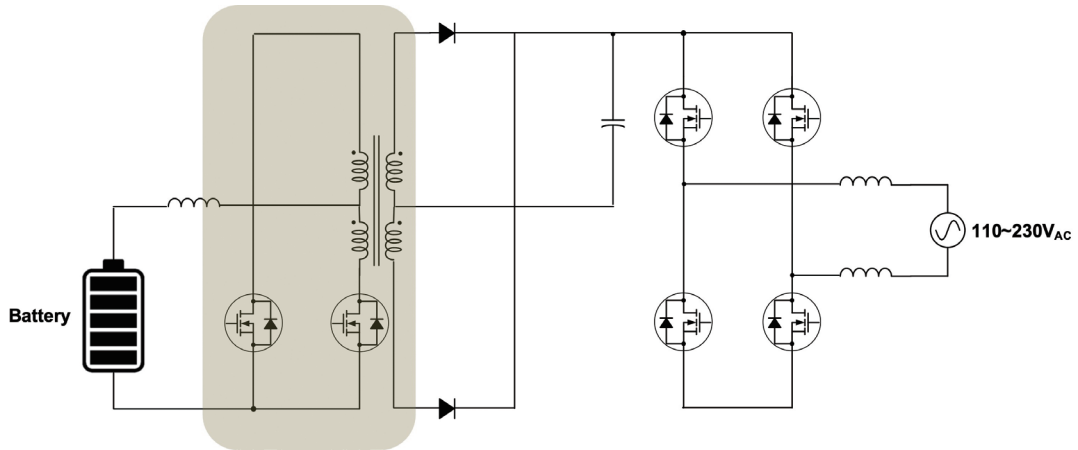
eMOS E7	PMD60N180E7	600V / 180mΩ, DPAK
	PMD60N280E7	600V / 280mΩ, DPAK
	PMD60N380E7	600V / 380mΩ, DPAK
	PMF60N099E7	600V / 99mΩ, TO-220F-3L
	PMF60N180E7	600V / 180mΩ, TO-220F-3L
	PMF60N280E7	600V / 280mΩ, TO-220F-3L
	PMF60N380E7	600V / 380mΩ, TO-220F-3L

半桥LLC - 推荐产品

eMOS E7	PMD60N180E7	600V / 180mΩ, DPAK
	PMD60N280E7	600V / 280mΩ, DPAK
	PMD60N380E7	600V / 380mΩ, DPAK
	PMF60N099E7	600V / 99mΩ, TO-220F-3L
	PMF60N180E7	600V / 180mΩ, TO-220F-3L
	PMF60N280E7	600V / 280mΩ, TO-220F-3L
	PMF60N380E7	600V / 380mΩ, TO-220F-3L

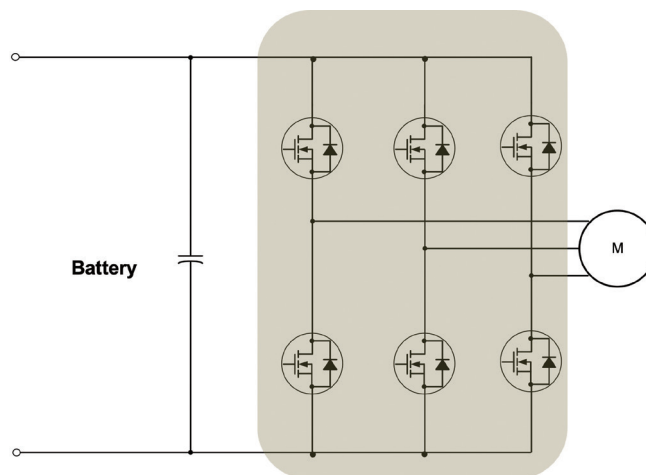
UPS和LV 马达驱动

UPS应用解决方案



UPS – DC-DC Stage		
150V eMOS	PSW15N5P9G1	150V / 5.9mΩ, TO-247-3L
200V eMOS	PSW20N9P7G1	200V / 9.7mΩ, TO-247-3L

低速电动车, 电动滑板车, 电动叉车应用解决方案



Three phase Inverter for LV Motor Drive		
150V eMOS	PSW15N5P9G1	150V / 5.9mΩ, TO-247-3L
200V eMOS	PSW20N9P7G1	200V / 9.7mΩ, TO-247-3L



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