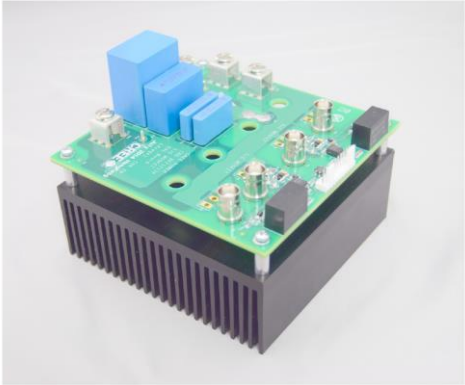


Discrete MOSFET評価ボード KIT8020CRD8FF1217P-1

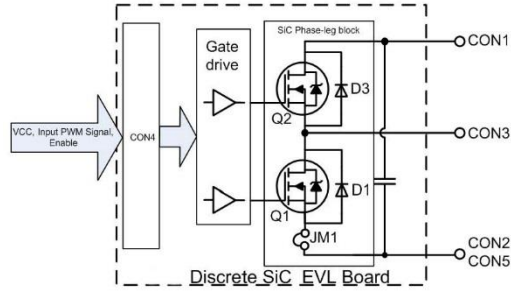


評価ボード内容

MOSFETを2つ、Diodeを2つ実装し、ハーフブリッジ回路構成となっておりますので、昇圧チョッパ、降圧チョッパ、フルブリッジ、ダイオードブリッジ等様々な回路を構成出来ます。
 また、同軸コネクタやテストピンが実装されておりますので測定も容易です。
 C2M0080120D 80 mohm MOSFET x 2、C4D20120D 20A Diode x 2が付属しており、簡単にSiCの動作を確認できます。
 更に絶縁シート、放熱フィン、ネジ、ワッシャー等も揃っており、すぐに評価環境を構築する事が可能です。

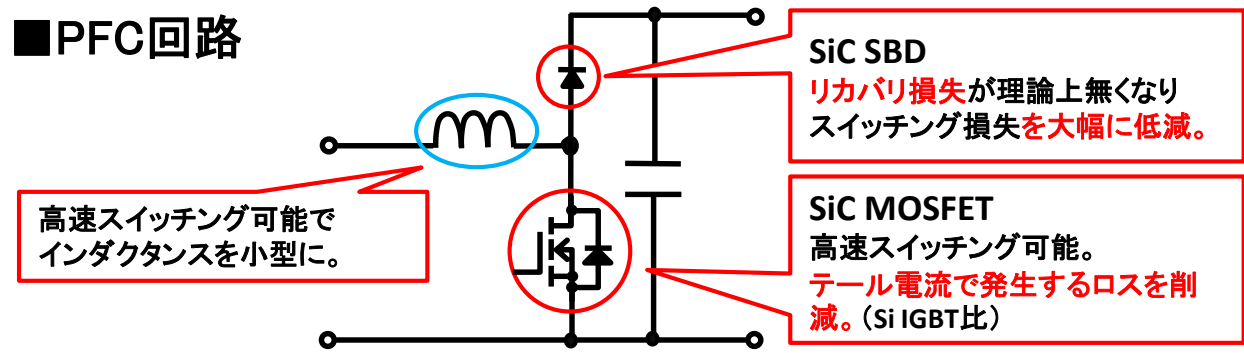
Package Contents

Item No.	QTY	P/N	Discription
1	1	CRD8FF1217P-1	Avago Driver version Eval board
2	4	AOS2182471	Ceramic tile
3	1	57908	Heat sink with mounting holes
4	2	C2M0080120D	80 mohm MOSFET
5	2	C4D20120D	20A Diode
6	1		Copper shorting strip
7	2	74270011	Ferrite Bead
8	8	91166a210	M3 washer, Zn-S, 7mm OD, 3.2mm ID
9	4	92005a129	M3x22mm, Zn-S, Board mounting Screw
10	4	94669a727	Stand offs, Al spacer, 6mm OD x 14mm
11	4	92005a120	M3x10mm, Zn-S, Device mounting screw
12	1		User Guide

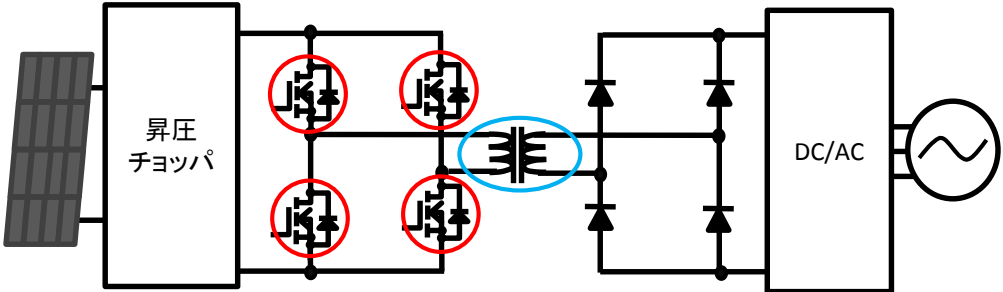


SiC提案事例

■PFC回路



■絶縁型パワコン 高周波絶縁部



高速スイッチングによって絶縁トランスが小型化できるメリット。
 SiC MOSFETは、従来のSi IGBTと比べてテール電流が無くなる事で、スイッチング損失を大幅低減。
 Si IGBTではSW周波数が20~50kHz程度に対し、SiC MOSFETならば数百kHz以上も可能。



Power Product Line (Rev.14.1)

- SiC MOSFETs
- SiC Schottky Diodes
- SiC Power Modules
- Gate Driver Boards

Wolfspeed パワーデバイス日本正規代理店



TEL:03-6891-0236 / FAX:03-5840-9854

<http://www.fujiele.co.jp/>

(2017年8月10日発行)

Wolfspeed SiC Schottky Diodes



パッケージ品

パッケージ品

パッケージ品

ベアダイ品

型名	VRRM (V)	IF(A) @150°C	VF(V) @25°C typ	Package						
CSD01060A	600	1	1.6	TO-220-2						
CSD01060E				TO-252-2						
C3D1P7060Q				1.7	1.5	QFN3.3				
C3D02060A				2	1.5	TO-220-2				
C3D02060E		TO-252-2								
C3D02060F		TO-220-F2								
C3D03060A		3	1.5			TO-220-2				
C3D03060E				TO-252-2						
C3D03060F				TO-220-F2						
C3D04060A				4	1.5	TO-220-2				
C3D04060E		TO-252-2								
C3D04060F		TO-220-F2								
C3D06060A		6	1.6			TO-220-2				
C3D06060G				TO-263-2						
C3D06060F				TO-220-F2						
C3D08060A				8	1.6	TO-220-2				
C3D08060G		TO-263-2								
C3D10060A		10	1.5			TO-220-2				
C3D10060G						TO-263-2				
C3D16060D(2in1)				16	1.6	TO-247-3				
C3D20060D(2in1)	20			1.5	TO-247-3					
C3D02065E	650	2	1.5	TO-252-2						
C3D03065E				3	1.5	TO-252-2				
C3D04065E				4	1.5	TO-252-2				
C3D04065A				4	1.5	TO-220-2				
C3D06065E		6	1.5	TO-252-2						
C3D06065A					6	1.6	TO-220-2			
C3D06065I								6	1.5	※TO-220I-2
C3D08065E								8	1.5	TO-252-2
C3D08065A		8	1.6	※TO-220I-2						
C3D10065E					10	1.5	TO-252-2			
C3D10065A										
C3D10065I								12	1.5	※TO-220I-2
C3D12065A		16	1.5	TO-220-2						
C3D16065A					16	1.6	TO-247-3			
C3D16065D(2in1)										
C3D20065D(2in1)								30	1.45	TO-247-3
C3D30065D(2in1)		20	1.35	TO-220-2						
CVFD20065A					50	1.5	TO-247-3			
C5D50065D										
C4D02120A								5	1.4	TO-252-2
C4D02120E	8	1.5	TO-220-2							
C4D05120A				10	1.4	TO-247-3				
C4D05120E							10			
C4D08120A								15	1.6	TO-220-2
C4D08120E	15	1.6	TO-220-2							
C4D10120D(2in1)				15	1.6	TO-247-3				
C4D10120A							15			
C4D10120E								15	1.6	TO-220-2
C4D15120A	15	1.6	TO-220-2							
C4D15120D				15	1.6	TO-247-3				

型名	VRRM (V)	IF(A) @150°C	VF(V) @25°C typ	Package
C4D20120D(2in1)	1200	20	1.5	TO-247-3
C4D30120D(2in1)		30	1.5	TO-247-3
C4D40120D(2in1)		40	1.5	TO-247-3
C3D10170H	1700	10	1.7	TO-247-2
C3D25170H		25	1.8	TO-247-2

ベアダイ品

型名	VRRM (V)	IF(A) @150°C	VF(V)@25°C	
			typ	max
CPWR-0600-S001B	600	1	1.6	1.8
CPW3-0600-S002B		2	1.5	1.8
CPW3-0600-S003B		3	1.5	1.8
CPW3-0600-S004B		4	1.5	1.8
CPW2-0600-S006B		6	1.6	1.8
CPW2-0600-S008B		8	1.6	1.8
CPW2-0600-S010B		10	1.5	1.8
CPW3-0650-S004B		650	4	1.5
CPW2-0650-S006B	6		1.6	1.8
CPW2-0650-S008B	8		1.6	1.8
CPW2-0650-S010B	10		1.5	1.8
CPW2-0650-S012B	12		1.5	1.8
CPW2-0650-S016B	16		1.5	1.8
CPW5-0650-Z030B	30		1.6	1.7
CPW5-0650-Z050B	50		1.5	1.8
CPW4-1200-S002B	1200	2	1.4	1.8
CPW4-1200-S005B		5	1.4	1.8
CPW4-1200-S008B		8	1.5	1.8
CPW4-1200-S010B		10	1.5	1.8
CPW4-1200-S015B		15	1.6	1.8
CPW4-1200-S020B		20	1.5	1.8
CPW5-1200-Z050B		50	1.6	1.8
CPW3-1700-S010B		1700	10	1.7
CPW3-1700-S025B	25		1.8	2
CPW5-1700-Z050B	50		1.6	1.9

Wolfspeed SiC MOSFETs

型名	VDSS (V)	ID(A) @25°C	RDS(on) (mΩ) @25°C typ	Package	
C3M0280090D	900	11.5	280	TO-247-3	
C3M0280090J		11	280	TO-263-7	
C3M0120090D		23	120	TO-247-3	
C3M0120090J		22	120	TO-263-7	
C3M0065090D		36	65	TO-247-3	
C3M0065090J		35	65	TO-263-7	
C3M0120100J		22	120	TO-263-7	
C3M0120100K		22	120	TO-247-4	
C3M0065100J		35	65	TO-263-7	
C3M0065100K		35	65	TO-247-4	
C2M0280120D	1200	10	280	TO-247-3	
C2M0160120D		19	160	TO-247-3	
C2M0080120D		36	80	TO-247-3	
C2M0040120D		60	40	TO-247-3	
C2M0025120D		90	25	TO-247-3	
C3M0075120K		30	75	TO-247-4	
C3M0075120J		30	75	TO-263-7	
C2M1000170D		1700	5	1000	TO-247-3
C2M1000170J			5.3	1000	TO-263-7

型名	VDSS (V)	ID(A) @25°C	RDS(on)(mΩ) @25°C	
			typ	max
CPM3-0900-0065B	900	36	65	-
CPM3-0900-0010A		196	10	12
CPM3-1000-0065B	1000	36	65	-
CPM2-1200-0160B	1200	19	160	196
CPM2-1200-0080B		36	80	98
CPM2-1200-0040B		60	40	52
CPM2-1200-0025B		98	25	34
CPM2-1700-0045B	1700	72	45	70

TO-247-4: Driver Source 端子付き
TO-263-7: Low Impedance, Driver Source 端子付き

Wolfspeed SiC Power Modules

型名	VDSS (V)	ID(A) @90°C	RDS(on)(mΩ)@25°C		Package
			typ	max	
CCS050M12CM2	1200	59	25	34	Six-Pack, 45mm
CCS020M12CM2	1200	20	80	98	Six-Pack, 45mm
CAS120M12BM2	1200	138	13	16	Half-Bridge, 62mm
WAS300M12BM2	1200	293	4.2	5.3	Half-Bridge, 62mm
CAS300M12BM2	1200	293	4.2	5.3	Half-Bridge, 62mm
CAS325M12HM2	1200	256	3.6	4.3	H-B, High-performance
CAS300M17BM2	1700	225	8	10	Half-Bridge, 62mm

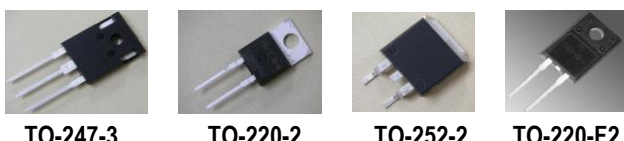


Wolfspeed Gate Driver Boards

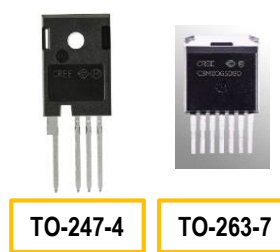
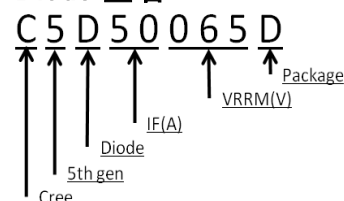
型式	Description	ch	Mounting style
CRD-001 (評価用)	Gate Drive Evaluation Board for Discrete Wolfspeed Z-FET SiC 1200V ~ 1700V MOSFET	1	Daughter board
CGD15HB62P1 (評価用)	Dual Gate Drive Evaluation Board 9A for 62mm 1200V Module CAS300M12BM2, CAS120M12BM2	2	Direct Mount
CGD15HB62LP (評価用)	Dual Gate Drive Evaluation Board 14A for 62mm 1200V Module CAS325M12HM2	2	Direct Mount
CGD15FB45P1 (評価用)	Six Channel Gate Drive Evaluation Board 9A for 45mm 1200V Module CCS020M12CM2, CCS050M12CM2	6	Direct Mount
PT62SCMD12 (量産用)	ProDrive Dual Gate Drive Board with Protection Features for 62mm 1200V Module CAS300M12BM2	2	Direct Mount
PT62SCMD17 (量産用)	ProDrive Dual Gate Drive Board with Protection Features for 62mm 1700V Module CAS300M17BM12	2	Direct Mount



※ TO-220I-2: Isolated TO-220-2



Diode 型名



MOSFET 型名

