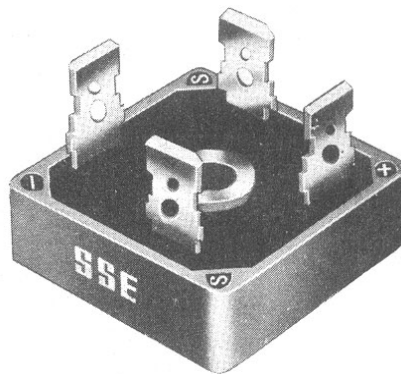


**STANDARD RECTIFIERS**  
**FAST RECOVERY RECTIFIERS**  
**ULTRA FAST RECOVERY RECTIFIERS**  
**SCHOTTKY RECTIFIERS**  
**SILICON CARBIDE RECTIFIER BRIDGES**  
**MODULAR BRIDGES SINGLE & THREE PHASE**



2016

Manufactured by:



**SSE**<sup>®</sup>



**SOLID STATE ELECTRONICS CO. PVT. LTD.**

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## **Importance of Incorporating Silicon Fast Recovery Diodes and Silicon Carbide Schottkys in Rectifier Bridges**

Power Semiconductors are quite often used in inverter applications with DC-Link. High switching frequencies generate harmonics and line distortion. It is important that electronic circuits in equipments reduce these influences to meet EMI filtering requirements according to EMI/EMC VDE and other international standards.

This noise level can be reduced by up to 10dB when the input rectifier bridges are configured with Fast Recovery Diodes ( $T_{rr} = 100 \text{ nsec}$  to  $200 \text{ nsec}$ ) as they enable faster turn off resulting in lower peak recovery currents compared to standard recovery normal rectifier diodes.

This noise level can be further reduced by approximately another 5dB when using rectifier bridges with Ultra Fast Recovery Diodes ( $T_{rr} = 35 \text{ nsec}$ ) and still further when configured with Silicon Carbide Schottky Rectifier Diodes ( $T_{rr} < 10 \text{ nsec}$ ).

These Fast, Ultra Fast Recovery Diodes and Silicon Carbide Schottky Rectifier Diodes result in much lower cost electronic circuits and equipment as the size of the EMI filter networks with its bulky capacitors and inductors is substantially reduced.

The trend today is to replace normal rectifier bridges with Fast, Ultra Fast and Silicon Carbide Schottky Rectifier Bridges to make more compact and lower cost equipment. These are now available for both Single and Three Phase AC use.

The metal housing of Modular Rectifier Bridges is preferred over plastic housing bridges as the cost of heatsink is further reduced or eliminated. Our 25 Amp and 35 Amp Bridges offer up to 5.0 Amp and 8.0 Amp respectively in free air at ambient temperatures up to  $45^{\circ} \text{ C}$ .

Metal Case Fast, Ultra Fast and Silicon Carbide Schottky Rectifier Bridges are the clear choice of circuit designers today.

Manufactured by:



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**TREND SETTERS IN POWER SEMICONDUCTORS**

## Company Profile

Solid State Electronics Co. Pvt. Ltd., incorporated in March 1971, has been synonymous with Power Semiconductors for almost 4 decades now, under the SSE Brand Name. Production began at small factory in Worli, Mumbai that same year.

The first Power Semiconductor launched with the SSE Brand Name was a Silicon Controlled Rectifier (Thyristor) of 35 Amps RMS capacity in the TO-48 (TO-208AA) Stud Type Metal Package. In the coming months, TO-64, TO-39, TO-66, TO-3, TO-65 (TO-208AC), TO-103, TO-94, TO-93, TO-118 and 0.5 / 1.0 inch Hockey Puck Press Paks were gradually introduced.

A few years later, around 1974 and thereafter, Triacs, in TO-39, TO-66, TO-3, TO-48 (TO-208AA), Diacs and Quadracs (Triac / Diac combination devices) were gradually introduced.

These products gave SSE a sole monopoly in the Indian and Asian market (outside of Japan) which lasted for 14 long years.

SSE shifted to Marol in the Suburbs of Mumbai City, very close to the city's International Airport around mid 1977 and expanded its manufacturing activities to become the only Semiconductor factory in India exclusively engaged in the manufacture of Power Semiconductors.

SSE received a registration of its Trademark in 1979.

SSE began exports of its Power Semiconductors to West Europe, Korea and East European Countries in 1978. This was a time when India was still importing Power Semiconductors from the Western World.

SSE has numerous firsts to its credit: All diffused SCRs, Invertors SCRs. Amplifying Gate SCRs, Sensitive Gate SCRs. Triacs, Sensitive Gate Logic Triacs, High Frequency Triacs, NPN & PNP Power Transistors and Darlingtons for low, medium and high frequency operation have been pioneered by SSE in India.

Compact Modular Rectifier Bridges and Fast Recovery Rectifier Diodes were exported to many countries from 1979 onwards. SSE make Standard and Fast Recovery Rectifiers & Bridges are the main stay of the heavy industry in India. Schottky Rectifiers, Fast Recovery, Ultra Fast Recovery and Super Fast Epitaxial Power Rectifiers in DO-4 (DO-203AA), DO-5 (DO-203AB), DO-8, DO-9 and Press Paks were introduced as early as in 1982. In 1988, SSE introduced a whole new line of low, and medium power Rectifier Bridges, Axial Diodes, Axial Schottky Rectifiers, Axial Fast Recovery Rectifiers and Bridges in P6, P3 (DO-203AA) KBPC and Metal Case Packages.

A large majority of SSE Power Semiconductors carry International JEDEC / PROELECTRON type numbers with specification generally a little superior to these International Standards. Devices meeting military specifications (JSS list) are also available. Numerous Devices have been approved with CIL/LCSO/ERTL(W). In addition, to getting customer approvals, SSE has a modern testing facility in the factory and makes no compromises in the matters of Quality Control. All Devices undergo the strictest possible screening as enumerated in the latest Scientific Literature. Shipments are offered with guaranteed AQL of  $\leq 2.5\%$  and even  $\leq 1\%$  per lot. Most of the sophisticated Test Equipments as well as all production equipment has been manufactured on our own floor by our Engineers. This has enabled SSE to stay on the leading edge of technology.

SSE set up Diffusion facilities in 1972 and initiated Alloy Diffusion activities very successfully. SSE kept in step with the technological advances made all over the world and discontinued all obsolete processes immediately thereafter and in mid 1977 successfully launched the one step Diffusion process. Thus SSE apart from finished Power Semiconductors also offers Wafer, Diffused Chips and Sandwiches to its clients.

People ridiculed the efforts made by SSE to build Semiconductors. But the hand of scientists and engineers worked relentlessly having implicit faith and determination. SSE MADE IT. India MADE IT. Since 1978, made in India / SSE MAKE COMPONENTS are available round the globe, in many instruments, machine and life serving equipments. In this process SSE developed a middle level technology suitable and adapted for Indian conditions. SSE has proved that small is beautiful. Thus, SSE is today in position to offer expertise to set up similar projects in India and developing countries. There is a strong and dynamic network of Authorized stockiest and General Dealers in over TWENTY locations all over India. The customer list contains many blue chip OEMs and large public sector undertakings.

In 2008 SSE launched a whole new Axial Fast, Ultra Fast & Schottky Rectifiers and Modular Single Phase Bridges, Center Tap Rectifiers, Doublers Rectifiers and Dual Diodes with Fast Recovery (200 nsec. and 100 nsec), Ultra Fast Recovery (50 nsec.) and Schottky Rectifiers (Zero Recovery). This is the first time in the world that such Fast, Ultra Fast and Schottky Recovery Modular Rectifiers Bridges have been made available with Faston 6.4mm (1/4 inch) Terminals which make it easy to carry currents which PCB mounting Semiconductors and PCBs are incapable of carrying. Our 25 Amp to 35 Amp Modular Rectifier Bridges deliver 5.0 Amp to 8.0 Amp in free air without a heatsink.

We also offer Fast and Standard Recovery Modular Bridges in 100 A, 150 A and 200 Amp Rating.

Circuit designers have long awaited for reasonably priced Fast Recovery Modular Bridges to design Energy Efficient Rectifiers Equipment so that the need to mount high current TO-220 AB (TO-220) / TO-220 AC (TO3P) / TO-247AD / TO-264 AA Rectifiers on Printed Circuit Boards does not arise.

SSE can truly be called “The Trend Setters in Power Semiconductors”

**SSE**<sup>®</sup>





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**TREND SETTERS IN POWER SEMICONDUCTORS**

	STANDARD RECOVERY RECTIFIERS			CONTROLLED AVALANCHE RECTIFIERS		FAST RECOVERY RECTIFIERS				SCHOTTKY RECTIFIERS		
IF (AV) (AMP) @ T <sub>c</sub> °C	6 150	12 150	16 150	9.5 85	20 125	6 100	12 100	12 100	12 110	15 110	28 100	
PACKAGE	DO-203 AA (DO-4)			DO-203 AA (DO-4)		DO-203 AA (DO-4)				DO-203 AA (DO-4)		
VRRM VRSM VOLTS												
30 45 100 200 300 400 600 800 1000 1200 1400	36 54 200 300 400 500 720 960 1200 1400 1600	1N1342B 1N1344B 1N1345B 1N1346B 1N1348B 1N3988 1N3990	1N1200A 1N1202A 1N1203A 1N1204A 1N1206A 1N3671A 1N3673A 1N5331A	1N3616 1N3618 1N3619 1N3620 1N3622 1N3623 1N3624	BYX39-600 BYX39-800 BYX39-1000 BYX39-1200 BYX39-1400	BYX25-600 BYX25-800 BYX25-1000 BYX25-1200 BYX25-1400	1N3880 1N3881 1N3882 1N3883	1N3890 1N3891 1N3892 1N3893	BYX61-100 BYX61-200 BYX61-300 BYX61-400 BYX61-600 BYX61-800 BYX61-1000 BYX61-1200	BYT12-100 BYT12-200 BYT12-300 BYT12-400 BYT12-600 BYT12-800 BYT12-1000 BYT12-1200	BYV20-30 BYV20-45	BYV21-30 BYV21-45
IFSM (AMP)	150	220	280	125	360	150	150	150	200	300	600	
I <sup>2</sup> t	110	240	390	78	650	110	110	110	225	450	1800	
VFM @ IF (AV)	1.2	1.3	1.2	1.7	1.8	1.4	1.4	1.5	1.5	0.6	0.56	
R <sub>θJC</sub> (°C/W)	3.0	2.0	1.0	4.5	1.3	2.5	2.5	2.5	2.5	2.2	1.0	
T <sub>J</sub> (MAX) °C	200	200	200	175	175	150	150	150	150	150	150	
T <sub>RR</sub> (NS)	-	-	-	-	-	200*	200*	100*	50**	-	-	
PRSM (KW)	-	-	-	4	18	-	-	-	-	-	-	
REMARKS						* IF = 1A, VR = 30V, DI/DT = 15A/μSEC ** IF = 0.5A, IR = 1A, IRR = 0.25A						

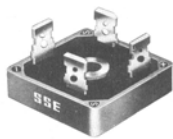


	STANDARD RECOVERY RECTIFIERS			CONTROLLED AVALANCHE RECTIFIERS	FAST RECOVERY RECTIFIERS						SCHOTTKY RECTIFIERS			
	IF (AV) (AMP) @ T <sub>c</sub> °C	40 140	70 140		100 130	48 112	20 100	30 100	30 100	30 100	60 90	60 100	60A 100	80A 90
PACKAGE	DO-203 AB (DO-5)			DO-203 AB (DO-5)	DO-203 AB (DO-5)						DO-203 AB (DO-5)			
VRRM VRSM VOLTS														
30 45 100 200 300 400 600 800 1000 1200 1400 1600	36 54 200 300 400 500 720 960 1200 1400 1600 1800	40HF10 40HF20 40HF30 40HF40 40HF60 40HF80 40HF100 40HF120 40HF140 40HF160	70HF10 70HF20 70HF30 70HF40 70HF60 70HF80 70HF100 70HF120 70HF140 70HF160	85HF10 85HF20 85HF30 85HF40 85HF60 85HF80 85HF100 85HF120 85HF140 85HF160	BYX56-600 BYX56-800 BYX56-1000 BYX56-1200 BYX56-1400	1N3900 1N3901 1N3902 1N3903	1N3910 1N3911 1N3912 1N3913	BYX65-100 BYX65-200 BYX65-300 BYX65-400	BYT30-100 BYT30-200 BYT30-300 BYT30-400	ESM243-100 ESM243-200 ESM243-300 ESM243-400	BYT60-100 BYT60-200 BYT60-300 BYT60-400	BYX63-600 BYT65B-600	BYX65-600 BYT65B-800 BYT65B-1000 BYT65B-1200	BYV22-30 BYV23-30 BYV22-45 BYV23-45
IFSM (AMP)	570	1200	1700	800	225	300	300	500	800	800	1000	1000		
I <sup>2</sup> t	1600	7100	14500	3200	250	450	450	1200	3200	3200	5000	11250		
VFM @ IF (AV)	1.90	1.35	1.20	1.8	1.4	1.4	1.5	1.5	1.5	1.5	0.55	0.55		
R <sub>θJC</sub> (°C/W)	0.65	0.45	0.35	0.8	1.5	1.0	1.0	1.2	0.7	0.7	0.6	0.6		
T <sub>J</sub> (MAX) °C	180	180	180	175	150	150	150	150	165	150	150	150		
T <sub>RR</sub> (NS)	-	-	-	-	200*	200*	100*	50**	100*	50**	-	-		
PRSM (KW)	-	-	-	40	-	-	-	-	-	-	-	-		
REMARKS	FOR DO-5 WITH PIGTAIL REPLACE 70HF AND 85HF SERIES BY 71HF AND 86HF. FOR REVERSE POLARITY REPLACE BY 70HFR, 86HFR ETC.				* IF = 1A, VR = 30V, DI/DT = 15A/μSEC ** IF = 0.5A, IR = 1A, IRR = 0.25A									

	STANDARD RECOVERY RECTIFIERS			FAST RECOVERY RECTIFIERS		
IF (AV) (AMP) @ T <sub>c</sub> °C	100 130	150 143	250 144	100 90	150 90	250 90
PACKAGE	DO-8	DO-8	DO-9	DO-8	DO-8	DO-9
VRRM VRSM VOLTS						
100 200	A170A	A180A	A190A			
200 300	A170B	A180B	A190B	A177B	A187B	A197B
300 400	A170C	A180C	A190C	A177C	A187C	A197C
400 500	A170D	A180D	A190D	A177D	A187D	A197D
600 720	A170M	A180M	A190M	A177M	A187M	A197M
800 960	A170N	A180N	A190N	A177N	A187N	A197N
1000 1200	A170P	A180P	A190P	A177P	A187P	A197P
1200 1400	A170PB	A180PB	A190PB			
1400 1600	A170PD	A180PD	A190PD			
1600 1800	A170PM	A180PM	A190PM			
1800 2000	A170PN	A180PN	A190PN			
2000 2200	A170L	A180L	A190L			
IFSM (AMP)	2500	3400	6000	2500	2800	5000
I <sup>2</sup> t	15,500	22,000	55,000	13,500	21,000	44,000
VFM @ IF (AV)	1.3	1.3	1.3	1.5	1.5	1.5
R <sub>θJC</sub> (°C/W)	0.4	0.3	0.18	0.4	0.3	0.18
T <sub>J</sub> (MAX) °C	200	200	200	125	125	125
T <sub>RR</sub> (NS)	-	-	-	-	-	-
Q <sub>RR</sub> (μc)	-	-	-	25.0	40.0	60.0
REMARKS	* Models listed are stud cathode (forward polarity). For stud anode (reverse polarity) use suffix "R" viz. A170R					

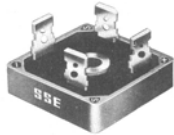


	STANDARD RECOVERY RECTIFIERS			FAST RECOVERY RECTIFIERS		
IF (AV) (AMP) @ T <sub>c</sub> °C	500 105	750 105	1000 105	500 90	750 90	1000 90
PACKAGE	DO-9	TO-118	TO-118	DO-9	TO-118	TO-118
VRRM VRSM VOLTS						
200 300	SR500B	SR750B	SR1000B	SRF500B	SRF750B	SRF1000B
400 500	SR500D	SR750D	SR1000D	SRF500D	SRF750D	SRF1000D
600 720	SR500M	SR750M	SR1000M	SRF500M	SRF750M	SRF1000M
800 960	SR500N	SR750N	SR1000N	SRF500N	SRF750N	SRF1000N
1000 1200	SR500P	SR750P	SR1000P	SRF500P	SRF750P	SRF1000P
1200 1400	SR500PB	SR750PB	SR1000PB			
1400 1600	SR500PD	SR750PD	SR1000PD			
1600 1800						
1800 2000						
2000 2200						
2200 2400						
2400 2600						
IFSM (AMP)	7500	9000	12000	6500	7500	9000
I <sup>2</sup> t	200,000	270,000	400,000	100,000	200,000	300,000
VFM @ IF (AV)	1.3	1.3	1.3	1.5	1.5	1.5
R <sub>θJC</sub> (°C/W)	0.18	0.12	0.08	0.18	0.12	0.08
T <sub>J</sub> (MAX) °C	200	200	200	125	125	125
T <sub>RR</sub> (NS)	-	-	-	-	-	-
Q <sub>RR</sub> (μc)	-	-	-	80.0	100.0	120.0
REMARKS	<p>* Rectifiers listed are stud cathode (forward polarity). For stud anode (reverse polarity) use suffix "R" viz. SR500PBR</p> <p>* Also available high compression assembled Rectifiers for high reliability, low thermal fatigue applications.</p>					



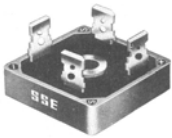

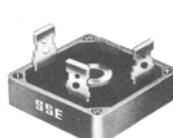
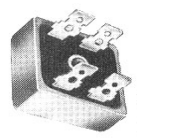
# Modular Silicon Rectifier Bridges

	SINGLE PHASE RECTIFIER BRIDGES					CENTRE-TAP RECTIFIER BRIDGES (POSITIVE OUTPUT)			THREE PHASE RECTIFIER BRIDGES		
	10	25	35	50	50	10	25	35	10	25	35
IL (AV) (AMP) @ T <sub>c</sub> °C	10 55	25 55	35 55	50 55	50 55	10 55	25 55	35 55	10 55	25 55	35 55
PACKAGE	29 x 29 MM SQ. ISOLATED METAL CASE 					29 x 29 MM SQ. ISOLATED METAL CASE 			29 x 29 MM SQ. ISOLATED METAL CASE 		
VRRM VRSM VOLTS											
25 50 50 75 100 200 200 300 300 400 400 500 600 720 800 960 1000 1200 1200 1400 1400 1600	SRM10F SRM10A SRM10B SRM10C SRM10D SRM10M SRM10N SRM10P SRM10PB SRM10PD	SRM25F SRM25A SRM25B SRM25C SRM25D SRM25M SRM25N SRM25P SRM25PB SRM25PD	SRM35F SRM35A SRM35B SRM35C SRM35D SRM35M SRM35N SRM35P SRM35PB SRM35PD	KBPC5001 KBPC5002 KBPC5003 KBPC5004 KBPC5006 KBPC5008 KBPC5010 KBPC5012 KBPC5014	SRM50F SRM50A SRM50B SRM50C SRM50D SRM50M SRM50N SRM50P SRM50PB SRM50PD	CRM10F CRM10A CRM10B CRM10C CRM10D CRM10M CRM10N CRM10P	CRM25F CRM25A CRM25B CRM25C CRM25D CRM25M CRM25N CRM25P	CRM35F CRM35A CRM35B CRM35C CRM35D CRM35M CRM35N CRM35P	3PRM10M 3PRM10N 3PRM10P 3PRM10PB 3PRM10PD	3PRM25M 3PRM25N 3PRM25P 3PRM25PB 3PRM25PD	3PRM35M 3PRM35N 3PRM35P 3PRM35PB 3PRM35PD
IFSM (AMP) I <sub>t</sub> <sup>2</sup> VFM @ IF (AV) R <sub>θJC</sub> (°C/W) T <sub>J</sub> (MAX) °C T <sub>RR</sub> (NS) Q <sub>RR</sub> (nC) PRSM (KW)	200 - 1.2 1.5 170 - - -	300 - 1.2 1.5 170 - - -	400 - 1.2 1.5 170 - - -	400 - 1.2 1.5 170 - - -	600 - 1.2 1.1 170 - - -	200 - 1.2 3.0 170 - - -	300 - 1.2 3.0 170 - - -	400 - 1.2 3.0 170 - - -	200 - 1.2 1.5 170 - - -	300 - 1.2 1.5 170 - - -	400 - 1.2 1.5 170 - - -
REMARKS	ALSO AVAILABLE DOUBLERS FOR 3 PHASE RECTIFICATION.					USE SUFFIX "N" FOR NEGATIVE OUTPUT BRIDGES VIZ. CRM10BN			RECOMMENDED FOR 3-PHASE 220 VOLT AC & 440 VOLT AC FULL WAVE RECTIFICATION.		
	CONSULT FACTORY FOR BRIDGES WITH CONTROLLED AVALANCHE OR FAST RECOVERY OR SCHOTTKY CHARACTERISTIC.										

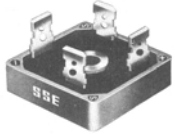
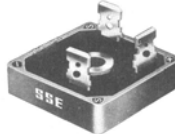
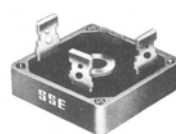
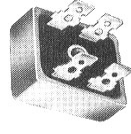
# Silicon Carbide Single & 3 Phase Rectifier Bridges

	SILICON CARBIDE SINGLE PHASE BRIDGES			SILICON CARBIDE THREE PHASE BRIDGES							
	IL (AV) (AMP) @ T <sub>c</sub> °C	10 55	25 55	35 55	10 55	25 55	35 55	50 55	100 55	150 55	200 55
PACKAGE	29 x 29 MM SQ. ISOLATED METAL CASE 			29 x 29 MM SQ. ISOLATED METAL CASE 			94 X 54 MM ISOLATED METAL BASE 				
VRRM VRSM VOLTS											
600 720	SRMSB10M	SRMSB25M	SRMSB35M	3PRMSB10M	3PRMSB25M	3PRMSB35M	3PRMSB50M	3PRMSB100M	3PRMSB150M	3PRMSB200M	
800 960	SRMSB10N	SRMSB25N	SRMSB35N	3PRMSB10N	3PRMSB25N	3PRMSB35N	3PRMSB50N	3PRMSB100N	3PRMSB150N	3PRMSB200N	
1000 1200	SRMSB10P	SRMSB25P	SRMSB35P	3PRMSB10P	3PRMSB25P	3PRMSB35P	3PRMSB50P	3PRMSB100P	3PRMSB150P	3PRMSB200P	
1200 1400	SRMSB10PB	SRMSB25PB	SRMSB35PB	3PRMSB10PB	3PRMSB25PB	3PRMSB35PB	3PRMSB50PB	3PRMSB100PB	3PRMSB150PB	3PRMSB200PB	
1400 1600	SRMSB10PD	SRMSB25PD	SRMSB35PD	3PRMSB10PD	3PRMSB25PD	3PRMSB35PD	3PRMSB50PD	3PRMSB100PD	3PRMSB150PD	3PRMSB200PD	
IFSM (AMP)	200	300	400	200	300	400	600	1500	2000	3000	
$I_t^2$											
VFM @ IF (AV)	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	
R <sub>θJC</sub> (°C/W)	1.5	1.5	1.5	1.5	1.5	1.5	1	0.65	0.65	0.5	
T <sub>J</sub> (MAX) °C	175	175	175	175	175	175	175	175	1.75	1.75	
T <sub>RR</sub> (NS)	<10	<10	<10	<10	<10	<10	<10	<20	<20	<20	
Q <sub>RR</sub> (nC)	25	25	25	25	25	25	68	129	129	129	
PRSM (KW)	-	-	-	-	-	-					
REMARKS	RECOMMENDED FOR SINGLE PHASE 110 VOLT AC & 240 VOLT AC FULL WAVE RECTIFICATION			RECOMMENDED FOR 3-PHASE 220 VOLT AC & 440 VOLT AC FULL WAVE RECTIFICATION.							

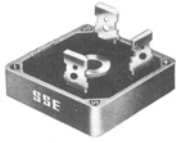

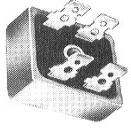
# Fast Recovery Modular Rectifier Bridges

	FAST RECOVERY RECTIFIER BRIDGES			FAST RECOVERY RECTIFIER CENTRE-TAP RECTIFIER BRIDGES (POSITIVE OUTPUT)			FAST RECOVERY RECTIFIER DOUBLER RECTIFIER BRIDGES			FAST RECOVERY DUAL RECTIFIERS
	IL (AV) (AMP) @ T <sub>c</sub> °C	10 40	25 40	35 40	10 40	25 40	35 40	5 40	10 40	15 40
PACKAGE	29 x 29 MM SQ. ISOLATED METAL CASE			29 x 29 MM SQ. ISOLATED METAL CASE			29 x 29 MM SQ. ISOLATED METAL CASE			29 x 29 MM SQ. ISOLATED METAL CASE
VRRM VRSM VOLTS										
50 75	SRMF10F	SRMF25F	SRMF35F	CRMFB10F	CRMFB25F	CRMFB35F				DDMF30F
100 200	SRMF10A	SRMF25A	SRMF35A	CRMFB10A	CRMFB25A	CRMFB35A				DDMF30A
200 300	SRMF10B	SRMF25B	SRMF35B	CRMFB10B	CRMFB25B	CRMFB35B				DDMF30B
300 400	SRMF10C	SRMF25C	SRMF35C	CRMFB10C	CRMFB25C	CRMFB35C				DDMF30C
400 500	SRMF10D	SRMF25D	SRMF35D	CRMFB10D	CRMFB25D	CRMFB35D				DDMF30D
600 720	SRMF10M	SRMF25M	SRMF35M	CRMFB10M	CRMFB25M	CRMFB35M	DRMF05M	DRMF10M	DRMF15M	DDMF30M
800 960	SRMF10N	SRMF25N	SRMF35N	CRMFB10N	CRMFB25N	CRMFB35N	DRMF05N	DRMF10N	DRMF15N	
1000 1200	SRMF10P	SRMF25P	SRMF35P	CRMFB10P	CRMFB25P	CRMFB35P	DRMF05P	DRMF10P	DRMF15P	
1200 1400	SRMF10PB	SRMF25PB	SRMF35PB	CRMFB10PB	CRMFB25PB	CRMFB35PB	DRMF05PB	DRMF10PB	DRMF15PB	
1400 1600							TO ORDER FACTORY ASSEMBLED THREE PHASE FULL WAVE RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "X3CF"			
IFSM (AMP) I <sup>2</sup> t	200 -	300 -	400 -	200 -	300 -	400 -	200 -	300 -	400 -	300 -
VFM @ IF (AV) UP TO 600V	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
VFM @ IF (AV) UP TO 1000V	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
R <sub>θJC</sub> (°C/W)	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0	-
T <sub>J</sub> (MAX) °C	150	150	150	150	150	150	150	150	150	150
T <sub>RR</sub> (NS) Up to 600V	100	100	100	100	100	100	100	100	100	100
T <sub>RR</sub> (NS) Up to 1200V	200	200	200	200	200	200	200	200	200	200
REMARKS				USE SUFFIX "N" FOR NEGATIVE OUTPUT BRIDGES VIZ. CRMFB10BN			RECOMMENDED FOR 3-PHASE AC FULL WAVE RECTIFICATION. USE ONE DOUBLER PER PHASE			
CONSULT FACTORY FOR BRIDGES WITH CONTROLLED AVALANCHE OR FAST RECOVERY OR SCHOTTKY CHARACTERISTIC.										



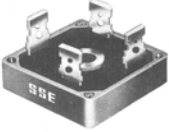

# Ultra Fast Recovery Modular Rectifier Bridges

	ULTRA FAST RECOVERY RECTIFIER BRIDGES			ULTRA FAST RECOVERY CENTRE-TAP RECTIFIER BRIDGES (POSITIVE OUTPUT)			ULTRA FAST RECOVERY DOUBLER RECTIFIER BRIDGES			ULTRA FAST RECOVERY DUAL RECTIFIERS	
IL (AV) (AMP) @ T <sub>c</sub> °C	10 40	25 40	35 40	10 40	25 40	35 40	5 40	10 40	15 40	2 X 30 40	
PACKAGE	29 x 29 MM SQ. ISOLATED METAL CASE 			29 x 29 MM SQ. ISOLATED METAL CASE 			29 x 29 MM SQ. ISOLATED METAL CASE 			29 x 29 MM SQ. ISOLATED METAL CASE 	
VRRM VRSM VOLTS											
50 100 200 300 400 600 800 1000 1200 1400	75 200 300 400 500 720 960 1200 1400	SRMUF10F SRMUF10A SRMUF10B SRMUF10C SRMUF10D SRMUF10M	SRMUF25F SRMUF25A SRMUF25B SRMUF25C SRMUF25D SRMUF25M	SRMUF35F SRMUF35A SRMUF35B SRMUF35C SRMUF35D SRMUF35M	CRMUF10F CRMUF10A CRMUF10B CRMUF10C CRMUF10D CRMUF10M	CRMUF25F CRMUF25A CRMUF25B CRMUF25C CRMUF25D CRMUF25M	CRMUF35F CRMUF35A CRMUF35B CRMUF35C CRMUF35D CRMUF35M	DRMUF05F DRMUF05A DRMUF05B DRMUF05PC DRMUF05D DRMUF05M	DRMUF10F DRMUF10A DRMUF10B DRMUF10C DRMUF10D DRMUF10M	DRMUF15F DRMUF15A DRMUF15B DRMUF15C DRMUF15D DRMUF15M	DDMUF30F DDMUF30A DDMUF30B DDMUF30C
								TO ORDER FACTORY ASSEMBLED THREE PHASE FULL WAVE RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "X3CF"			
IFSM (AMP) I <sup>2</sup> <sub>t</sub> VFM @ IF (AV) UP TO 400V VFM @ IF (AV) UP TO 800V R <sub>θJC</sub> (°C/W) T <sub>J</sub> (MAX) °C T <sub>RR</sub> (NS) PRSM (KW)	200 – 1.5 1.7 1.5 150 50 –	300 – 1.5 1.7 1.5 150 50 –	400 – 1.5 1.7 1.5 150 50 –	200 – 1.5 1.7 3.0 150 50 –	300 – 1.5 1.7 3.0 150 50 –	400 – 1.5 1.7 3.0 150 50 –	200 – 1.5 1.7 3.0 150 50 –	300 – 1.5 1.7 3.0 150 50 –	400 – 1.5 1.7 3.0 150 50 –	300 – 1.5 1.7 3.0 150 50 –	
REMARKS				USE SUFFIX "N" FOR NEGATIVE OUTPUT BRIDGES VIZ. CRMUF10BN			RECOMMENDED FOR 3-PHASE AC FULL WAVE RECTIFICATION. USE ONE DOUBLER PER PHASE				
CONSULT FACTORY FOR BRIDGES WITH CONTROLLED AVALANCHE OR FAST RECOVERY OR SCHOTTKY CHARACTERISTIC.											

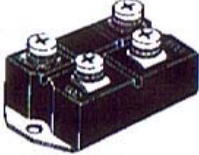
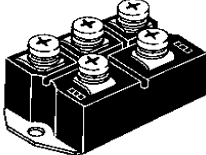
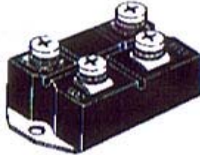
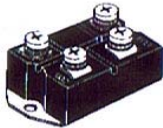
# Schottky Rectifier Bridges

	SCHOTTKY CENTRE-TAP RECTIFIER BRIDGES (POSITIVE OUTPUT)				SCHOTTKY DOUBLER RECTIFIER BRIDGES				SCHOTTKY DUAL RECTIFIERS	
IL (AV) (AMP) @ T <sub>c</sub> °C	10 55	25 55	35 55	50 55	5 55	10 55	15 55	25 55	2 X 30 55	
PACKAGE	29 x 29 MM SQ. ISOLATED METAL CASE 				29 x 29 MM SQ. ISOLATED METAL CASE 				29 x 29 MM SQ. ISOLATED METAL CASE 	
VRRM VRSM VOLTS										
50 100 150 200 250 300 400 600 800 1000 1200 1400	75 150 200 250 300 400 500 720 960 1200 1400 1600	CRMSB10F CRMSB10A CRMSB10G CRMSB10B CRMSB10H CRMSB10C CRMSB10D CRMSB10M	CRMSB25F CRMSB25A CRMSB25G CRMSB25B CRMSB25H CRMSB25C CRMSB25D CRMSB25M	CRMSB35F CRMSB35A CRMSB35G CRMSB35B CRMSB35H CRMSB35C CRMSB35D CRMSB35M	CRMSB50F CRMSB50A CRMSB50G CRMSB50B CRMSB50H CRMSB50C CRMSB50D CRMSB50M	DRMSB05A DRMSB05G DRMSB05B DRMSB05H DRMSB05C DRMSB05D DRMSB05M	DRMSB10A DRMSB10G DRMSB10B DRMSB10H DRMSB10C DRMSB10D DRMSB10M	DRMSB15A DRMSB15G DRMSB15B DRMSB15H DRMSB15C DRMSB15D DRMSB15M	DRMSB25A DRMSB25G DRMSB25B DRMSB25H DRMSB25C DRMSB25D DRMSB25M	DDMUF30F DDMUF30A DDMUF30G DDMUF30B DDMUF30H DDMUF30C DDMUF30D DDMUF30M
IFSM (AMP) I <sub>t</sub> <sup>2</sup> VFM @ IF (AV) UP TO 150V VFM @ IF (AV) UP TO 300V VFM @ IF (AV) UP TO 600V R <sub>θJC</sub> (°C/W) T <sub>j</sub> (MAX) °C	200 - 0.6 1.2 1.7 3.0 150	300 - 0.6 1.2 1.7 3.0 150	400 - 0.6 1.2 1.7 3.0 150	600 - 0.6 1.2 1.7 3.0 150	200 - 0.6 1.2 1.7 3.0 150	300 - 0.6 1.2 1.7 3.0 150	400 - 0.6 1.2 1.7 3.0 150	600 - 0.6 1.2 1.7 3.0 150	300 - 0.6 1.2 1.7 3.0 150	
REMARKS	USE SUFFIX "N" FOR NEGATIVE OUTPUT BRIDGES VIZ. CRMSB10BN				RECOMMENDED FOR 3-PHASE AC FULL WAVE RECTIFICATION. USE ONE DOUBLER PER PHASE					

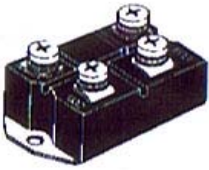
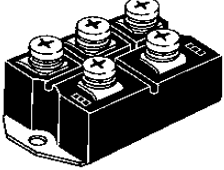
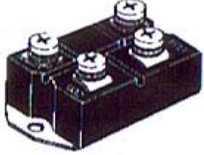
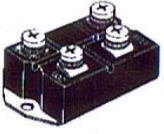
# Silicon Carbide Schottky Rectifier Diodes & Bridges

	SILICON CARBIDE SCHOTTKY RECTIFIER DIODES				SILICON CARBIDE SCHOTTKY SINGLE PHASE RECTIFIER BRIDGES			SILICON CARBIDE SCHOTTKY THREE PHASE RECTIFIER BRIDGES		
IL (AV) (AMP) @ T <sub>c</sub> °C	10 75	25 75	35 75	50 75	10 55	25 55	35 55	10 55	25 55	35 55
PACKAGE	DO-203 AA (DO-4)	DO-203 AB (DO-5)			29 x 29 MM SQ. ISOLATED METAL CASE			29 x 29 MM SQ. ISOLATED METAL CASE		
VRRM VRSM VOLTS										
400 500 600 720 800 960 1000 1200 1200 1400 1400 1600	SB10D SB10M SB10N SB12P SB12PB SB12PD	SB25D SB25M SB25N SB25P SB25PB SB25PD	SB35D SB35M SB35N SB35P SB35PB SB35PD	SB50D SB50M SB50N SB50P SB50PB SB50PD	SRMSB10D SRMSB10M SRMSB10N SRMSB10P SRMSB10PB SRMSB10PD	SRMSB25D SRMSB25M SRMSB25N SRMSB25P SRMSB25PB SRMSB25PD	SRMSB35D SRMSB35M SRMSB35N SRMSB35P SRMSB35PB SRMSB35PD	3PRMSB10M 3PRMSB10N 3PRMSB10P 3PRMSB10PB 3PRMSB10PD	3PRMSB25M 3PRMSB25N 3PRMSB25P 3PRMSB25PB 3PRMSB25PD	3PRMSB35M 3PRMSB35N 3PRMSB35P 3PRMSB35PB 3PRMSB35PD
					TO ORDER FACTORY ASSEMBLED SINGLE PHASE FULL WAVE RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "HS"			TO ORDER FACTORY ASSEMBLED THREE PHASE FULL WAVE RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "HS"		
IFSM (AMP) I <sub>t</sub> <sup>2</sup>	200 -	300 -	400 -	600 -	200 -	300 -	400 -	200 -	300 -	400 -
VFM @ IF (AV)	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
T <sub>RR</sub> (NS)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Q <sub>RR</sub> (nC)	25	68	68	129	25	25	68	25	25	68
R <sub>θJC</sub> (°C/W)	2.0	0.65	0.65	0.50	1.5	1.5	1.5	1.5	1.5	1.5
T <sub>J</sub> (MAX) °C	175	175	175	175	175	175	175	175	175	175
REMARKS					RECOMMENDED FOR SINGLE PHASE AC FULL WAVE RECTIFICATION.			RECOMMENDED FOR THREE PHASE AC FULL WAVE RECTIFICATION.		

# Modular High Power Rectifier Bridges

	SINGLE PHASE RECTIFIER BRIDGES			3 PHASE RECTIFIER BRIDGES			HALF CONTROLLED RECTIFIER BRIDGES			DUAL RECTIFIERS	
IL (AV) (AMP) @ T <sub>c</sub> °C	100 100	150 100	200 100	50 100	100 100	150 100	50 80	100 80	150 80	2 X 100 100	
PACKAGE	94 x 54 MM ISOLATED METAL CASE 			94 x 54 MM ISOLATED METAL CASE 			94 x 54 MM ISOLATED METAL CASE 			94 x 54 MM ISOLATED METAL CASE 	
VRRM VRSM VOLTS											
25 50 100 200 300 400 600 800 1000 1200 1400 1600 1800	50 75 200 300 400 500 720 960 1200 1400 1600 1800 2000	SRM100F SRM100A SRM100B SRM100C SRM100D SRM100M SRM100N SRM100P SRM100PB SRM100PD SRM100PM	SRM150F SRM150A SRM150B SRM150C SRM150D SRM150M SRM150N SRM150P SRM150PB SRM150PD SRM150PM	SRM200F SRM200A SRM200B SRM200C SRM200D SRM200M SRM200N SRM200P SRM200PB SRM200PD SRM200PM	3PRM50F 3PRM50A 3PRM50B 3PRM50C 3PRM50D 3PRM50M 3PRM50N 3PRM50P 3PRM50PB 3PRM50PD 3PRM50PM	3PRM100F 3PRM100A 3PRM100B 3PRM100C 3PRM100D 3PRM100M 3PRM100N 3PRM100P 3PRM100PB 3PRM100PD 3PRM100PM	3PRM150F 3PRM150A 3PRM150B 3PRM150C 3PRM150D 3PRM150M 3PRM150N 3PRM150P 3PRM150PB 3PRM150PD 3PRM150PM	HCRM50M HCRM50N HCRM50P HCRM50PB HCRM50PD	HCRM100M HCRM100N HCRM100P HCRM100PB HCRM100PD	HCRM150M HCRM150N HCRM150P HCRM150PB HCRM150PD	DDM100F DDM100A DDM100B DDM100C DDM100D DDM100M DDM100N DDM100P DDM100PB DDM100PD DDM100PM
IFSM (AMP)	1800	2400	2800	800	1000	1200	800	1000	1200	2400	
I <sup>2</sup> <sub>t</sub>	-	-	-	-	-	-	-	-	-	-	
VFM @ IF (AV)	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.5	1.5	1.3	
R <sub>θJC</sub> (°C/W)	0.25	0.2	0.15	0.5	0.4	0.3	1.0	1.0	1.0	-	
T <sub>j</sub> (MAX) °C	170	170	170	170	170	170	125	125	125	170	
T <sub>RR</sub> (NS)	-	-	-	-	-	-	-	-	-	-	
PRSM (KW)	-	-	-	-	-	-	-	-	-	-	
REMARKS	TO ORDER FACTORY ASSEMBLED RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "XCF".			TO ORDER FACTORY ASSEMBLED RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "XCF".			TO ORDER FACTORY ASSEMBLED RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "XCF".				
CONSULT FACTORY FOR BRIDGES WITH CONTROLLED AVALANCHE OR FAST RECOVERY OR SCHOTTKY CHARACTERISTIC.											

# Modular High Power Fast Recovery Rectifier Bridges

	SINGLE PHASE FAST RECOVERY RECTIFIER BRIDGES			3 PHASE FAST RECOVERY RECTIFIER BRIDGES			HALF CONTROLLED FAST RECOVERY RECTIFIER BRIDGES			FAST RECOVERY DUAL RECTIFIERS
IL (AV) (AMP) @ T <sub>c</sub> °C	100 100	150 100	200 100	50 100	100 100	150 100	50 80	100 80	150 80	2 X 100 100
PACKAGE	94 x 54 MM ISOLATED METAL CASE 			94 x 54 MM ISOLATED METAL CASE 			94 x 54 MM ISOLATED METAL CASE 			94 x 54 MM ISOLATED METAL CASE 
VRRM VRSM VOLTS										
25 50										
50 75	SRMF100F	SRMF150F	SRMF200F	3PRMF50F	3PRMF100F	3PRMF150F				DDMF100F
100 200	SRMF100A	SRMF150A	SRMF200A	3PRMF50A	3PRMF100A	3PRMF150A				DDMF100A
200 300	SRMF100B	SRMF150B	SRMF200B	3PRMF50B	3PRMF100B	3PRMF150B				DDMF100B
300 400	SRMF100C	SRMF150C	SRMF200C	3PRMF50C	3PRMF100C	3PRMF150C				DDMF100C
400 500	SRMF100D	SRMF150D	SRMF200D	3PRMF50D	3PRMF100D	3PRMF150D				DDMF100D
600 720	SRMF100M	SRMF150M	SRMF200M	3PRMF50M	3PRMF100M	3PRMF150M	HCRMF50M	HCRMF100M	HCRMF150M	DDMF100M
800 960	SRMF100N	SRMF150N	SRMF200N	3PRMF50N	3PRMF100N	3PRMF150N	HCRMF50N	HCRMF100N	HCRMF150N	DDMF100N
1000 1200	SRMF100P	SRMF150P	SRMF200P	3PRMF50P	3PRMF100P	3PRMF150P	HCRMF50P	HCRMF100P	HCRMF150P	DDMF100P
1200 1400	SRMF100PB	SRMF150PB	SRMF200PB	3PRMF50PB	3PRMF100PB	3PRMF150PB	HCRMF50PB	HCRMF100PB	HCRMF150PB	DDMF100PB
1400 1600	SRMF100PD	SRMF150PD	SRMF200PD	3PRMF50PD	3PRMF100PD	3PRMF150PD	HCRMF50PD	HCRMF100PD	HCRMF150PD	DDMF100PD
1600 1800										
1800 2000										
IFSM (AMP)	1500	1800	2200	800	1000	1200	800	1000	1200	1800
I <sup>2</sup> <sub>t</sub>	-	-	-	-	-	-	-	-	-	-
VFM @ IF (AV)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
R <sub>θJC</sub> (°C/W)	0.25	0.2	0.15	0.5	0.4	0.3	1.0	1.0	1.0	-
T <sub>j</sub> (MAX) °C	150	150	150	150	150	150	125	125	125	150
T <sub>RR</sub> (NS)	100	100	100	100	100	100	100	100	100	100
Up to 600V										
T <sub>RR</sub> (NS)	200	200	200	200	200	200	200	200	200	200
Up to 1200V										
REMARKS	TO ORDER FACTORY ASSEMBLED RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "XCF".			TO ORDER FACTORY ASSEMBLED RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "XCF".			TO ORDER FACTORY ASSEMBLED RECTIFIER BRIDGE MOUNTED ON COOLING FINS USE SUFFIX "XCF".			
CONSULT FACTORY FOR BRIDGES WITH CONTROLLED AVALANCHE OR FAST RECOVERY OR SCHOTTKY CHARACTERISTIC.										



**Manufactured by:**



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