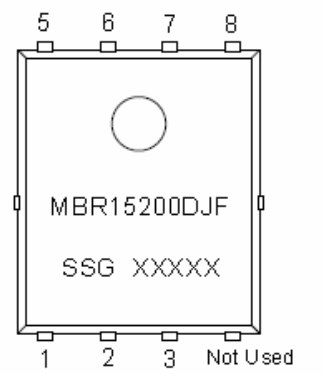
MBR15200DJF SCHOTTKY RECTIFIER

Applications:

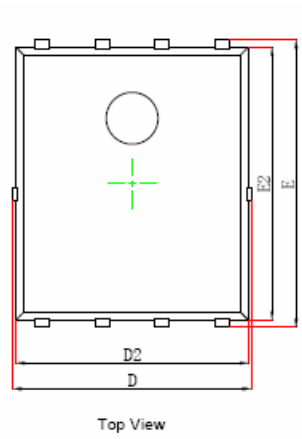
- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration



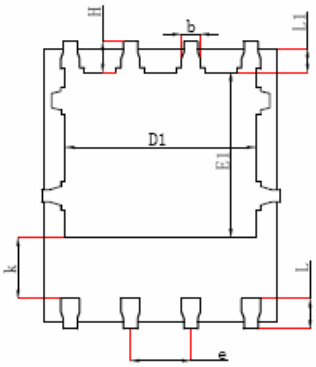
Features:

- Designed as Bypass Diodes for Solar Panels
- Selectively Rated for 200ºC Maximum Junction Temperature for High Thermal Reliability
- High Forward Surge Capability
- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

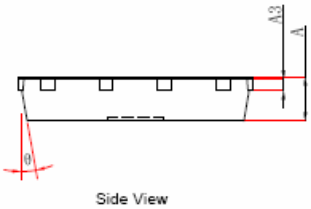
Mechanical Dimensions: In mm/Inches



Top View



Bottom View



Side View

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.000	0.035	0.039
A3	0.254REF.		0.010REF.	
D	4.944	5.096	0.195	0.201
E	5.974	6.126	0.235	0.241
D1	3.910	4.110	0.154	0.162
E1	3.375	3.575	0.133	0.141
D2	4.824	4.976	0.190	0.196
E2	5.674	5.826	0.223	0.229
k	1.190	1.390	0.047	0.055
b	0.350	0.450	0.014	0.018
e	1.270TYP.		0.050TYP.	
L	0.559	0.711	0.022	0.028
L1	0.424	0.576	0.017	0.023
H	0.574	0.726	0.023	0.029
θ	10°	12°	10°	12°

PDFNWB5×6-8L

Technical Data
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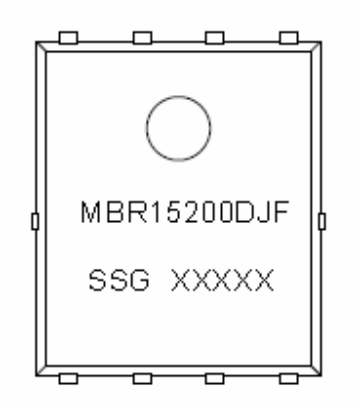
Green Products

Marking Diagram:



Where XXXXX is YYWWL

MBR	= Device Type
15	= Forward Current (15A)
200	= Reverse Voltage (200V)
DJF	= Package type
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

Cautions: Molding resin
Epoxy resin UL: 94V-0

Ordering Information:

Device	Package	Shipping
MBR15200DJF	PDFNWB5×6-8L (Pb-Free)	3000 pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	200	
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle @T_C =136 ℃, rectangular wave form	15	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, half Sine pulse	250	A

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop*	V_{F1}	@ 15 A, Pulse, T_J = 25 °C	0.92	V
	V_{F2}	@ 15 A, Pulse, T_J = 125 °C	0.76	V
Max. Reverse Current (per leg) *	I_{R1}	@V_R = rated V_R T_C = 25 °C	1.0	mA
	I_{R2}	@V_R = rated V_R T_C = 125 °C	10	mA
Max. Junction Capacitance (per leg)	C_T	@V_R = 5V, T_C = 25 °C f_{SIG} = 1MHz	400	pF
Max. Voltage Rate of Change	dv/dt	-	10,000	V/µs

* Pulse Width < 300µs, Duty Cycle <2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T_J	-	-55 to +200	°C
Max. Storage Temperature	T_{stg}	-	-55 to +200	°C
Max. Thermal Resistance Junction to Case	$R_{\theta JC}$	DC operation	2.5	°C/W
Approximate Weight	wt	-	0.095	g
Case Style	PDFNWB5×6-8L			

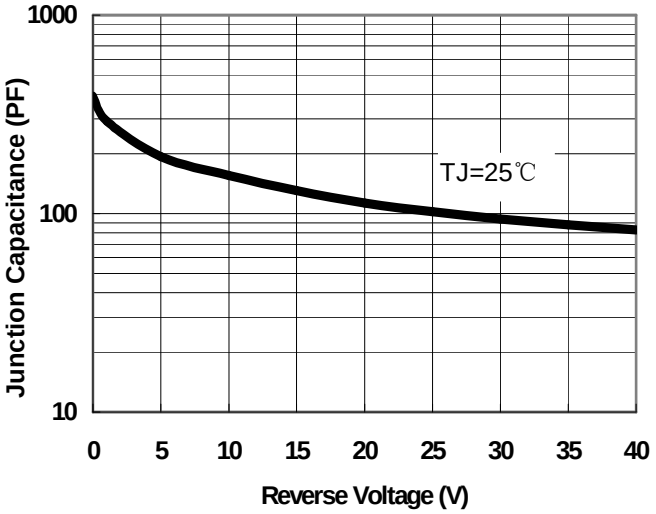


Fig.1-Typical Junction Capacitance

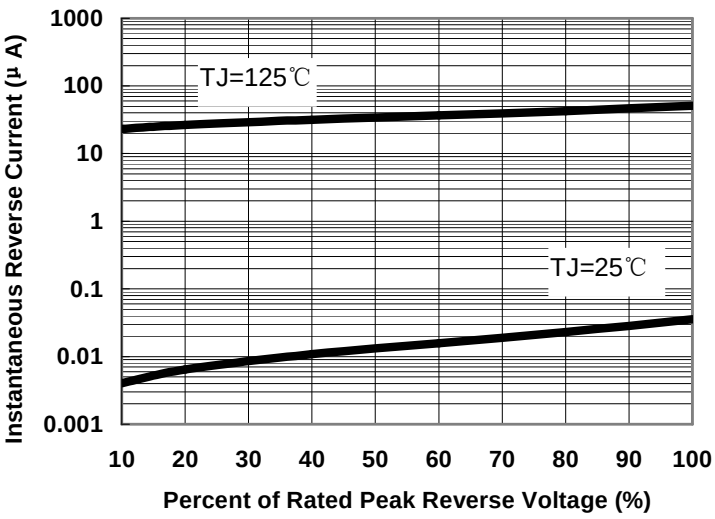


Fig.2-Typical Reverse Characteristics

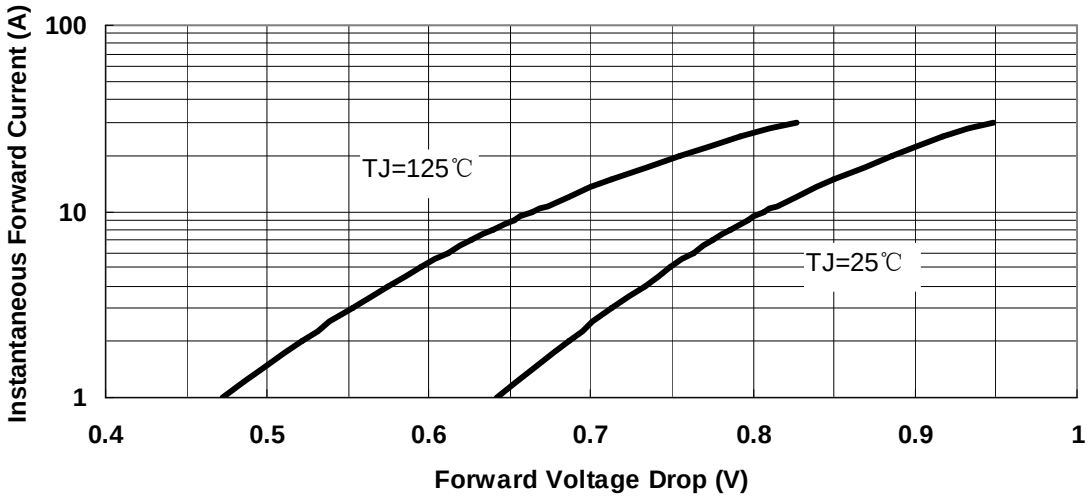


Fig.3-Typical Instantaneous Forward Voltage Characteristics

Technical Data ***Green Products***

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