

MBR20B200IH/DH

Power Schottky Rectifier - 20Amp 200Volt

Features

- -Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- -High Junction Temperature Capability
- -Low forward voltage, high current capability
- -High surge capacity
- -Low power loss, high efficiency
- -ESD performance human body mode > 4 KV
- -Halogen-Free

Application

-AC/DC Switching Adaptor and other Switching Power Supply -PDP

☐ Absolute maximum ratings

Symbol	Ratings	Unit	Conditions	
I F(AV)	20	А	Average Forward Current	
VRRM	200	V	Repetitive Peak Reverse Voltage	
IFSM	150	Α	Peak Forward Surge Current	
VF	0.72	V	Forward Voltage Drop	
Tj, Tstg	-50 to +175	°C	Operating and Storage Temperature	

Electrical characteristics

Parameters	Symbol	Ratings	Conditions
			Per Leg at IF = 10A
Maximum Instantaneous Forward Voltage	VF	0.90V	Tc = 25°C
		0.72V	Tc = 125°C
			Per Leg at VR = 200V
Maximum Reverse Leakage Current	lr	0.05mA	Tc = 25°C
		10mA	Tc = 125°C
Typical Thermal Resistance,Junction to Case	Rθ (j-c)	7 °C/W	Per Leg TO-251 / TO-252

Note : 1.Mounted on P.C.B with copper pad size 20mm x 30mm, thickness 1.5mm

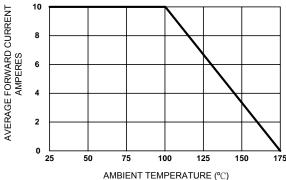
2.Reverse Surge 1.0A @ 0.004ms, 10 cycle

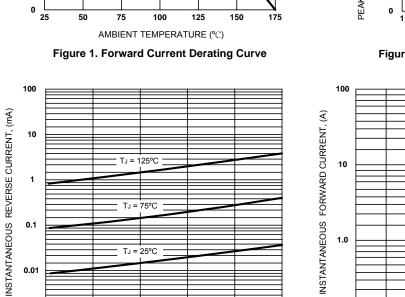
3.Repetitive Peak Reverse Current (IRRM) 0.5A @ Per Leg at tp = 2µs, 1kHz

0.1

0.01

0.001





PERCENT OF RATED PEAK REVERSE VOLTAGE, (%) Figure 3. Typical Reverse Characteristics

T_J = 25°C

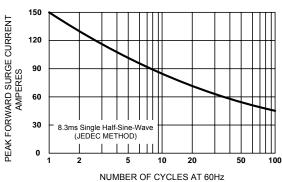


Figure 2. Maximum Non-repetitive Surge Current

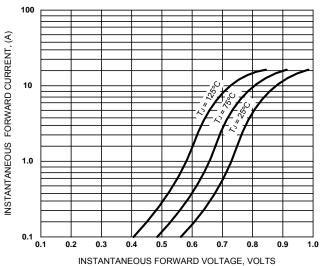
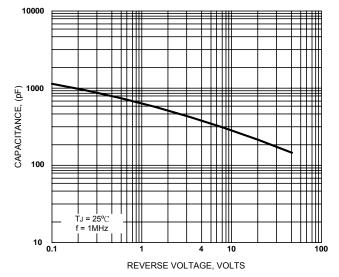


Figure 4. Typical Forward Characteristics

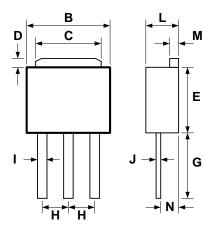


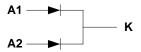
100

Figure 5. Typical Junction Capacitance

MBR20B200IH

T0-251

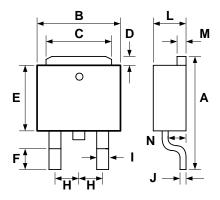


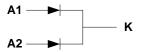


DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	NOTE
В	.250	.266	6.35	6.75	
С	.201	.217	5.10	5.50	
D	.033	.053	0.85	1.35	
Е	.228	.248	5.80	6.30	
G	.209	.228	5.30	5.80	
Н	.085	.096	2.15	2.45	
- 1	.030	.041	0.75	1.05	
J	.016	.024	0.40	0.60	
L	.083	.098	2.10	2.50	
М	.018	.026	0.45	0.65	
N	.031	.051	0.80	1.30	

MBR20B200DH

T0-252





DIMENSIONS						
DIM	INCHES		MILLIMETERS		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	.380	.400	9.65	10.15		
В	.250	.266	6.35	6.75		
С	.201	.217	5.10	5.50		
D	.033	.053	0.85	1.35		
Е	.228	.248	5.80	6.30		
F	.049	.065	1.25	1.65		
Н	.085	.096	2.15	2.45		
ı	.030	.041	0.75	1.05		
J	.016	.024	0.40	0.60		
L	.083	.098	2.10	2.50		
М	.018	.026	0.45	0.65		
N	.031	.051	0.80	1.30		



IMPORTANT NOTICE:

Sirect and Sirectsemi are registered trademarks of Sirect Semiconductor Incorporated. Sirect reserved the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase and use.

Products described herein may be covered by one or more United States, China, Taiwan or foreign patents pending.

Sirect products are not authorized for use as critical components in life support devices or system without express written approval of Sirect.

Sirect Semiconductor Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should customers purchase or use Sirect products for any unintended or unauthorized application, customers shall indemnify and hold Sirect and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

© Sirect Semiconductor Incorporated