

# MBR10B150IH/DH

### Power Schottky Rectifier - 10Amp 150Volt

#### 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 > 6 KV
- -Halogen-Free

### Application

-AC/DC Switching Adaptor and other Switching Power Supply

### ☐ Absolute maximum ratings

Symbol	Ratings	Unit	Conditions	
<b>I</b> F(AV)	10	Α	Average Forward Current	
VRRM	150	V	Repetitive Peak Reverse Voltage	
IFSM	120	Α	Peak Forward Surge Current	
VF	0.69	V	Forward Voltage Drop	
Tj, Tstg	-50 to +175	°C	Operating and Storage Temperature	

#### Electrical characteristics

Parameters	Symbol	Ratings	Conditions
			Per Leg at IF = 5A
Maximum Instantaneous Forward Voltage	VF	0.88V	Tc = 25°C
		0.69V	Tc = 125°C
			Per Leg at VR = 150V
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 1.5A @ 0.004ms, 10 cycle

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

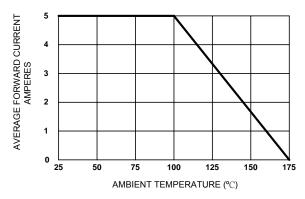


Figure 1. Forward Current Derating Curve

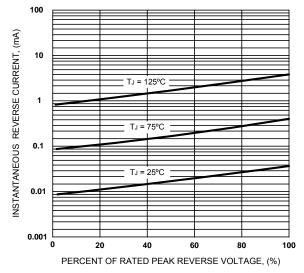


Figure 3. Typical Reverse Characteristics

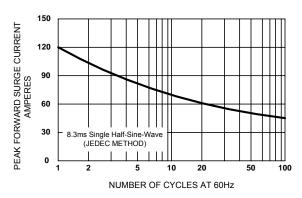


Figure 2. Maximum Non-repetitive Surge Current

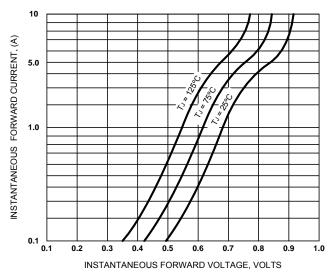


Figure 4. Typical Forward Characteristics

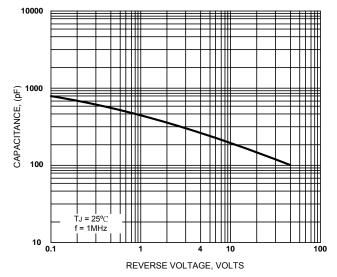
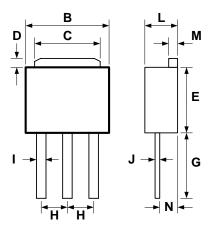
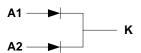


Figure 5. Typical Junction Capacitance

# **MBR10B150IH**

T0-251

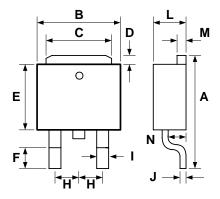


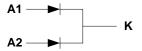


DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	NOTE
В	.250	.266	6.35	6.75	
С	.201	.217	5.10	5.50	
D	.033	.053	0.85	1.35	
Е	.228	.248	5.80	6.30	
G	.209	.228	5.30	5.80	
Н	.085	.096	2.15	2.45	
- 1	.030	.041	0.75	1.05	
J	.016	.024	0.40	0.60	
L	.083	.098	2.10	2.50	
М	.018	.026	0.45	0.65	
N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

# **MBR10B150DH**

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	·	



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