

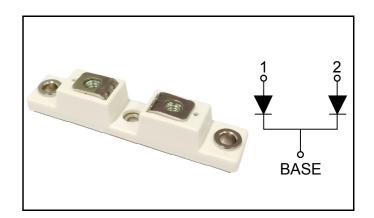
#### www.jshxm.com

### ■ Applications

- High Current Switching Power Supplies.
- High Frequency Power Supplies.
- Converter & Chopper.
- Plating Power Supplies.
- UPS System.
- Welder.
- Reverse Battery Protection.

#### **■** Features

- 175°C TJ Operation.
- Center Tap Module.
- High Frequency Operation.
- Low Forward Voltage.
- Lead (Pb)-free.
- Designed and qualified for industrial level.



PRODUCT SUMMARY						
TYPE	I <sub>F(AV)</sub>	VR				
MBR400H100S	400A	100V				

## **Absolute Maximum Ratings**

Item			Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage			$V_{RRM}$	100	V
Average Rectified Forward Current		Per Package	- I <sub>FAV</sub>	400	A
		Per Leg		200	
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)		Per Leg	I <sub>FSM</sub>	3000	А
Operating Junction Temperature			T <sub>J</sub>	-40∼175	°C
Storage Temperature			T <sub>STG</sub>	-40∼175	°C
Module to Sink	Recommended (M6)		М	3~4.7	Nm
Module Electrodes	Reco	ommended (M6)	IVI	3~4.7	Nm
Junction to Case Thermal Resistance(Per Leg)			$R_{ heta JC}$	0.18	°C/W
Module(Approximately)			Weight	68	g

# Electricity Character Per Leg(TJ=25°C unless otherwise specified)

Item	Test Condition		Value(min)	Value(typ)	Value(max)	Unit
$V_B$	TJ =25℃	IR=1mA	100	1		V
I <sub>R</sub>	TJ =25℃	VR=100V	_		0.05	mA
	TJ =125℃	VR=100V	_	_	50.00	mA
V <sub>F</sub>	TJ =25℃	IF=200A	_	0.8	0.9	V
	TJ =125℃	IF=200A	_		0.85	V



MBR400H100S

### **Characteristic Curves**

Fig1. Forward Voltage Drop vs Forward Current

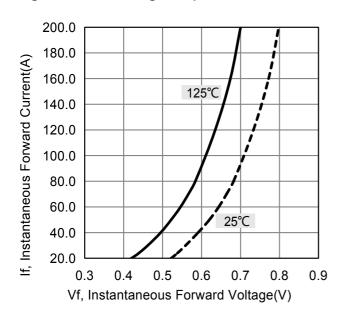


Fig2. Forward Current Derating Curve

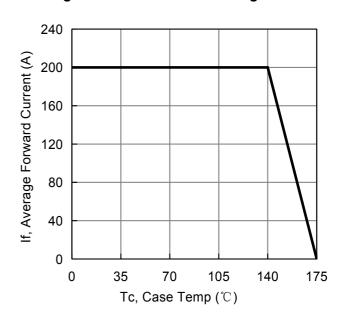
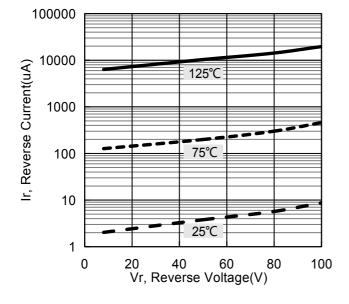
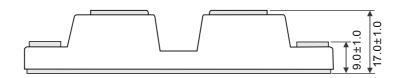


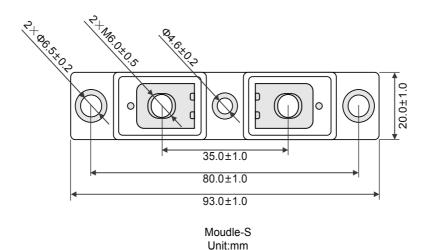
Fig3. Typical Reverse Current



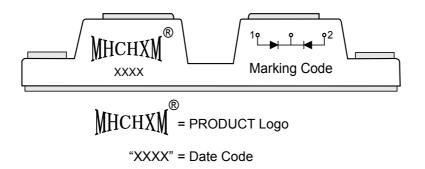
MBR400H100S

## **Package Outline Dimensions**





# **Marking Information**



"Marking Code" = MBR400H100S

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