

# **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
  Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Frequency Operation
- Low Forward Voltage Drop

# 60 Amp **Schottky Barrier** Rectifier 200 Volts

# Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	$V_{RWM}$	200	V
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>RMS</sub>	140	V
Average Rectified Forward Current			
Per Diode Per Device	I <sub>F(AV)</sub>	30 60	А
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave(Per Diode)	I <sub>FSM</sub>	500	А
Current Squared Time @ 1ms≤t≤8.3ms(Per Diode)	I²t	1037	A <sup>2</sup> s

# **Internal Structure**

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode		
2	Anode	MCC.	PIN 1 ∘——
		MBR60200PTH → → H ← →	PIN 3 PIN 2
		1111	

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

# TO-247 В PIN

DIMENSIONS						
DIM INCI		HES	MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.787	0.866	20.00	22.00		
В	0.598	0.638	15.20	16.20		
С	0.185	0.208	4.70	5.30		
D	0.035	0.059	0.90	1.50		
E	0.059	0.094	1.50	2.40		
F	0.067	0.091	1.70	2.30		
J	0.019	0.031	0.48	0.80		
K	0.748	0.833	19.00	21.15		
Р	0.122	0.189	3.10	4.80		
Q	0.118	0.150	3.00	3.80	Ф	
V	0.106	0.134	2.70	3.40		
G	0.197	0.224	5.00	5.70		



# Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
TJ	Operating Junction Temperature Range		-55		175	°C
T <sub>stg</sub>	Storage Temperature Range		-55		175	°C
Rth <sub>(J-C)</sub>	Thermal Resistance from Junction to Case	Per Diode		0.5		°C/W
Rth <sub>(J-C)</sub>	Thermal Resistance from Junction to Case	Per Device		1.0		°C/W

# Electrical Characteristics @ 25°C Unless Otherwise Specified(Per Diode)

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =30A;T <sub>J</sub> =25°C		0.80	0.83	V
		I <sub>F</sub> =30A;T <sub>J</sub> =125°C		0.67	0.73	v
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =200V;T <sub>J</sub> =25°C			0.05	mA
		V <sub>R</sub> =200V;T <sub>J</sub> =125°C			13	IIIA
Junction Capacitance	Сл	V <sub>R</sub> =4V;f=1MHz;T <sub>J</sub> =25°C		775		pF

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# **Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

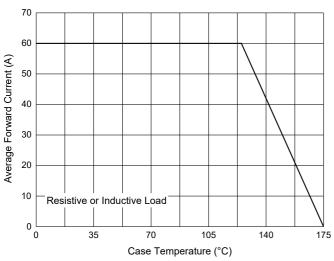


Fig. 3 - Typical Forward Characteristics

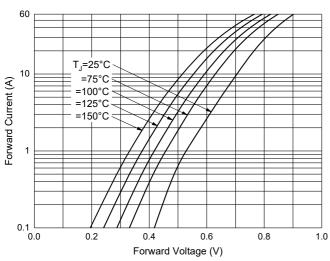


Fig. 5 - Typical Capacitance Characteristics

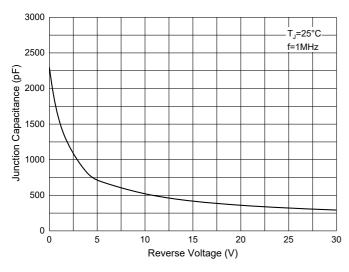


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

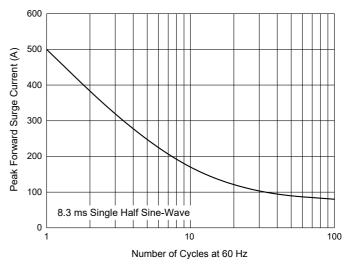
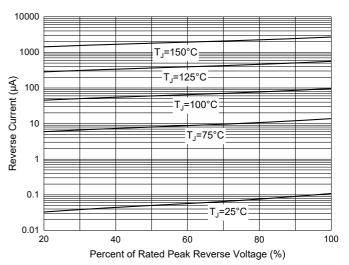


Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing		
Part Number-BP	Bulk:30pcs/Tube,360pcs/Box,1.8Kpcs/Carton		

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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