

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
- Guard ring for Enhanced Ruggedness and Long Term Reliability

10 Amp Schottky Barrier Rectifier 60 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V _{RWM}	60	V	
DC Blocking Voltage	V _R			
RMS Reverse Voltage	V _{RMS}	42	V	
Average Rectified Forward Current	I _{F(AV)}	10	Α	
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I _{FSM}	I _{FSM} 160		
Current Squared Time @ 1ms≤t≤8.3ms	l²t	106	A ² s	

TO-220AC

Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol			
1	Cathode					
2	Anode	MCC.	PIN 1 ⊶			
		MBR1060S	PIN 2 ○ CASE			

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

DIMENSIONS					
DIM	INCHES		MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.560	0.625	14.22	15.88	
В	0.380	0.420	9.65	10.67	
С	0.100	0.135	2.54	3.43	
D	0.230	0.270	5.84	6.86	
F		0.250		6.35	
G	0.500	0.580	12.70	14.73	
Н	0.190	0.210	4.83	5.33	
I	0.020	0.045	0.51	1.14	
J	0.012	0.025	0.30	0.64	
K	0.139	0.161	3.53	4.09	Ф
L	0.140	0.190	3.56	4.83	
М	0.045	0.055	1.14	1.40	
N	0.080	0.115	2.03	2.92	



Thermal characteristics

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
TJ	Operating Junction Temperature Range		-55		150	°C
T _{stg}	Storage Temperature Range		-55		150	°C
Rth _(J-C)	Thermal Resistance from Junction to Case			2		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V _F	I _F =10A;T _J =25°C		0.64	0.75	V
		I _F =10A;T _J =125°C		0.56	0.65	V
Reverse Current	I _R	V _R =60V;T _J =25°C			0.1	mA
		V _R =60V;T _J =125°C			20	ША
Junction Capacitance	CJ	V _R =4V;f=1MHz;T _J =25°C		450		pF



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

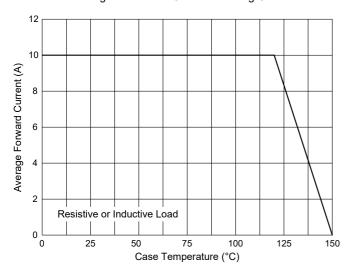


Fig. 3 - Typical Forward Characteristics

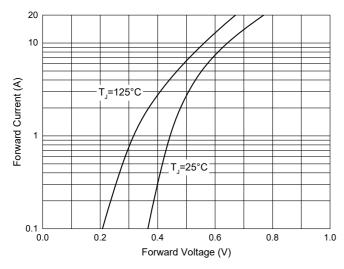


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

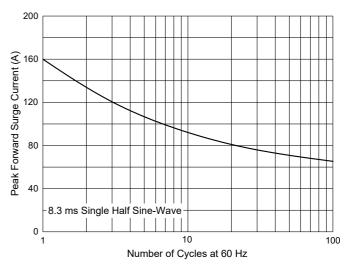
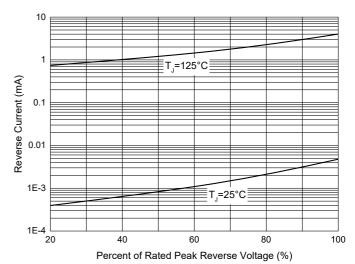


Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

Device	Packing		
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton		

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

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