

Silicon Power Schottky Diode

 $V_{RRM} = 20\text{ V} - 100\text{ V}$
 $I_F = 200\text{ A}$

Features

- High Surge Capability
- Types up to 100 V V_{RRM}

D-67 Package

Maximum ratings, at $T_j = 25\text{ }^{\circ}\text{C}$, unless otherwise specified ("R" devices have leads reversed)

Parameter	Symbol	Conditions	MBRH20045 (R)	MBRH20060 (R)	MBRH20080 (R)	MBRH200100 (R)	Unit
Repetitive peak reverse voltage	V_{RRM}		45	60	80	100	V
RMS reverse voltage	V_{RMS}		32	42	56	70	V
DC blocking voltage	V_{DC}		45	60	80	100	V
Continuous forward current	I_F	$T_C \leq 136\text{ }^{\circ}\text{C}$	200	200	200	200	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^{\circ}\text{C}$, $t_p = 8.3\text{ ms}$	3000	3000	3000	3000	A
Operating temperature	T_j		-40 to 175	-40 to 175	-40 to 175	-40 to 175	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-40 to 175	-40 to 175	-40 to 175	-40 to 175	$^{\circ}\text{C}$

Electrical characteristics, at $T_j = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	MBRH20045 (R)	MBRH20060 (R)	MBRH20080 (R)	MBRH200100 (R)	Unit
Diode forward voltage	V_F	$I_F = 200\text{ A}$, $T_j = 25\text{ }^{\circ}\text{C}$	0.65	0.75	0.84	0.84	V
Reverse current	I_R	$V_R = 20\text{ V}$, $T_j = 25\text{ }^{\circ}\text{C}$	5	5	5	5	mA
		$V_R = 20\text{ V}$, $T_j = 125\text{ }^{\circ}\text{C}$	250	250	250	250	

Thermal characteristics

Thermal resistance, junction - case	R_{thJC}		0.8	0.8	0.8	0.8	$^{\circ}\text{C/W}$
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Figure .1-Typical Forward Characteristics

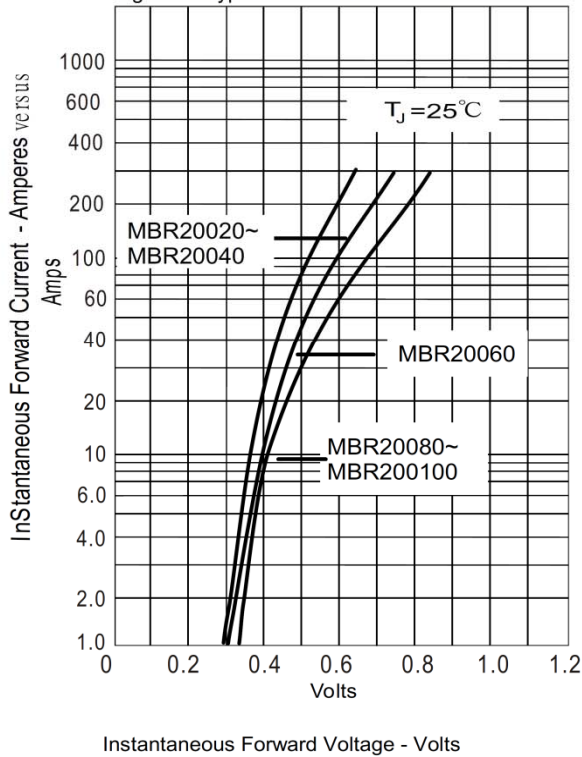


Figure .2- Forward Derating Curve

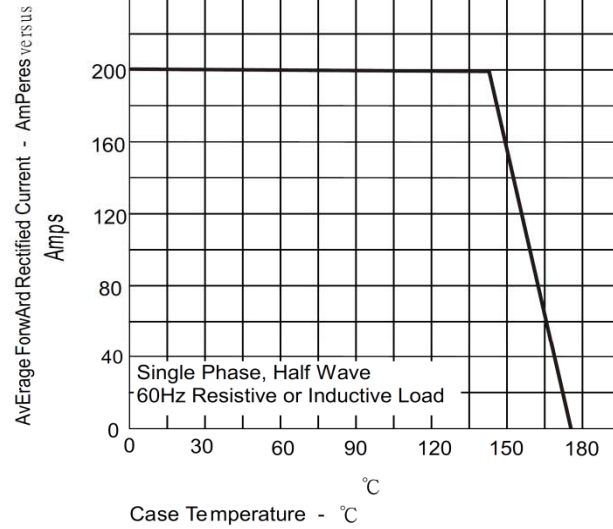


Figure .3-Peak Forward Surge Current

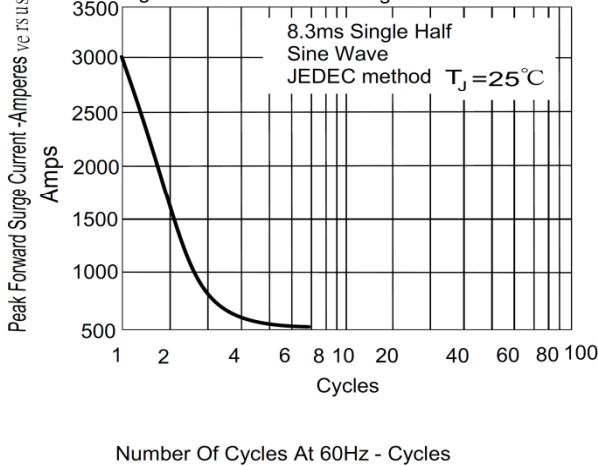
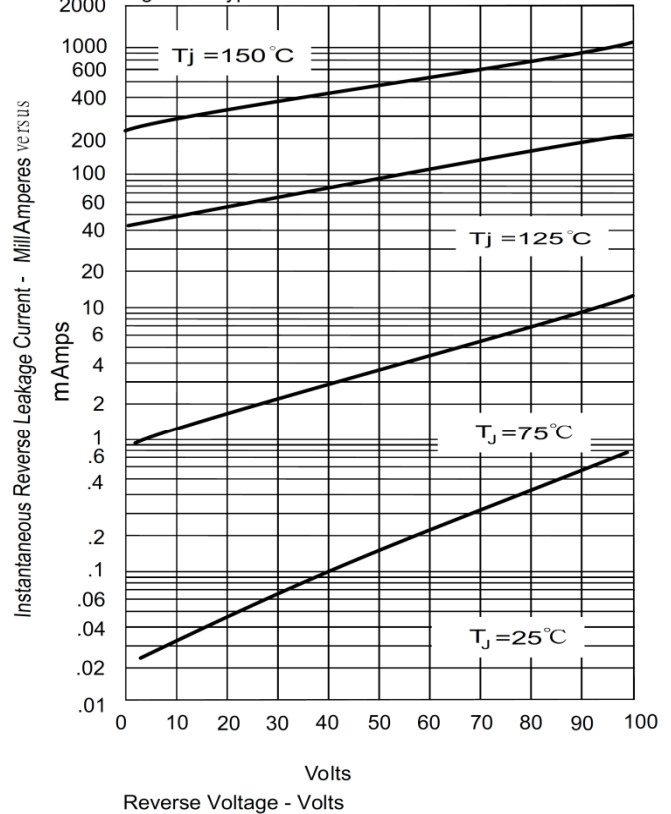
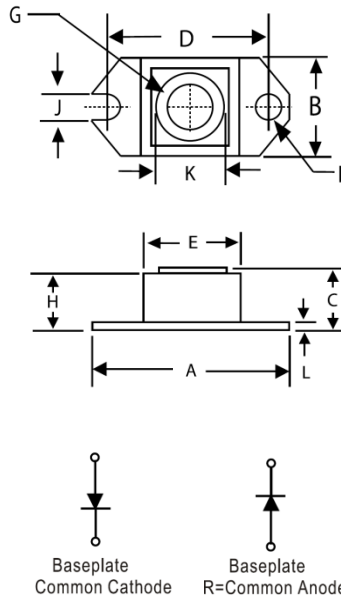


Figure .4-Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.515	1.560	38.48	39.62	
B	.725	.775	18.42	19.69	
C	.595	.625	15.11	15.88	
D	1.182	1.192	30.02	30.28	
E	.736	.744	18.70	18.90	
F	.152	.160	3.86	4.061	Ø
G	1/4- 20 UNC				
H	.540	.580	13.72	14.73	
J	.156	.160	3.96	4.06	
K	.480	.492	12.20	12.50	Ø
L	.120	.130	3.05	3.30	