

## Silicon Power Schottky Diode

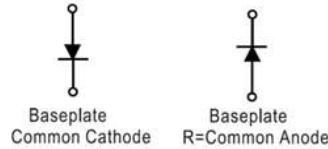
$V_{RRM} = 20\text{ V} - 40\text{ V}$

$I_{F(AV)} = 240\text{ A}$

### Features

- High Surge Capability
- Types from 20 V to 40 V  $V_{RRM}$
- Not ESD Sensitive

D-67 Package



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

Parameter	Symbol	Conditions	MBRH24020(R)	MBRH24030(R)	MBRH24035(R)	MBRH24040(R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		20	30	35	40	V
RMS reverse voltage	$V_{RMS}$		14	21	25	28	V
DC blocking voltage	$V_{DC}$		20	30	35	40	V
Operating temperature	$T_j$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MBRH24020(R)	MBRH24030(R)	MBRH24035(R)	MBRH24040(R)	Unit
Average forward current (per pkg)	$I_{F(AV)}$	$T_C = 125\text{ }^\circ\text{C}$	240	240	240	240	A
Peak forward surge current	$I_{FSM}$	$t_p = 8.3\text{ ms}$ , half sine	3300	3300	3300	3300	A
Maximum instantaneous forward voltage	$V_F$	$I_{FM} = 240\text{ A}$ , $T_j = 25\text{ }^\circ\text{C}$	0.72	0.72	0.72	0.72	V
Maximum instantaneous reverse current at rated DC blocking voltage	$I_R$	$T_j = 25\text{ }^\circ\text{C}$	1	1	1	1	mA
		$T_j = 100\text{ }^\circ\text{C}$	10	10	10	10	
		$T_j = 150\text{ }^\circ\text{C}$	50	50	50	50	

### Thermal characteristics

Thermal resistance, junction-case	$R_{\theta JC}$		0.30	0.30	0.30	0.30	$^\circ\text{C/W}$
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Figure .1- Typical Forward Characteristics

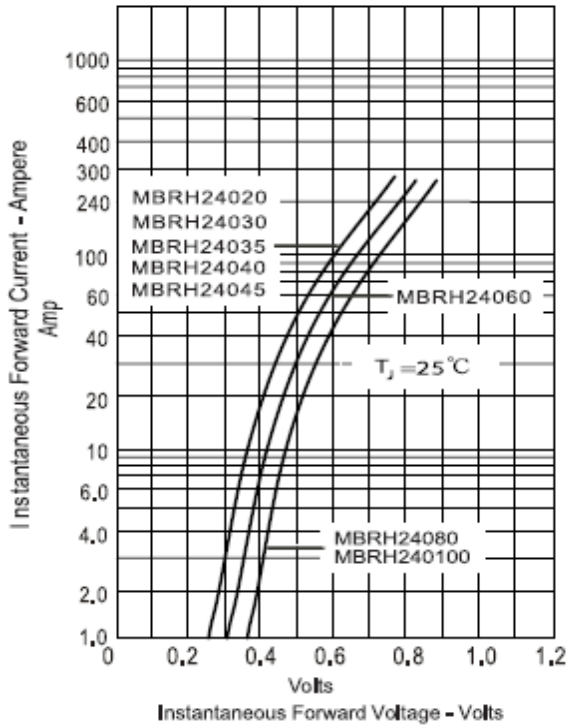


Figure .2- Forward Derating Curve

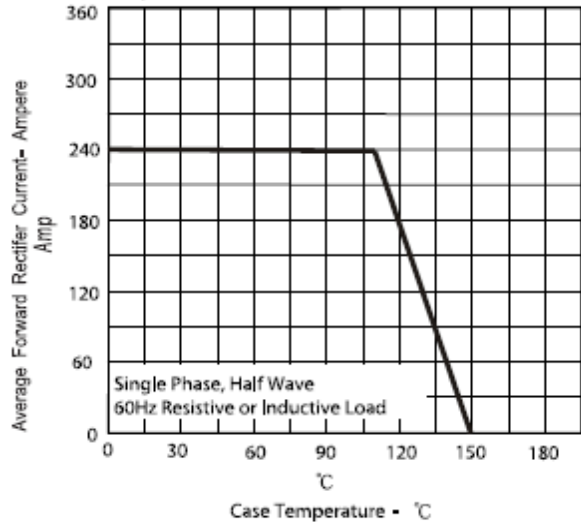


Figure .3- Peak Forward Surge Current

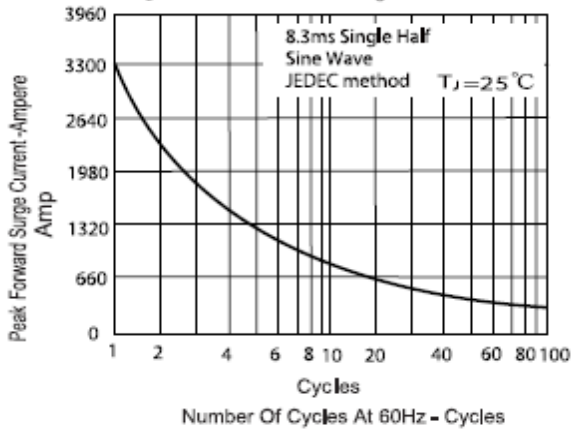
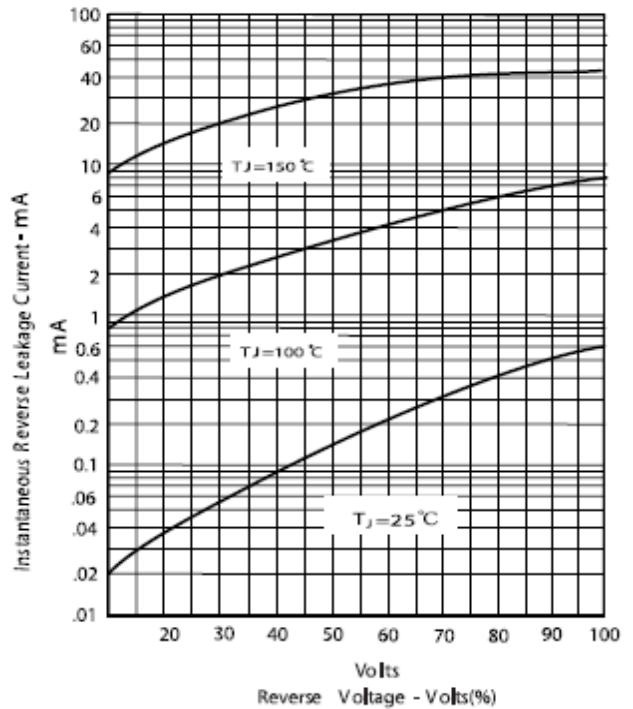
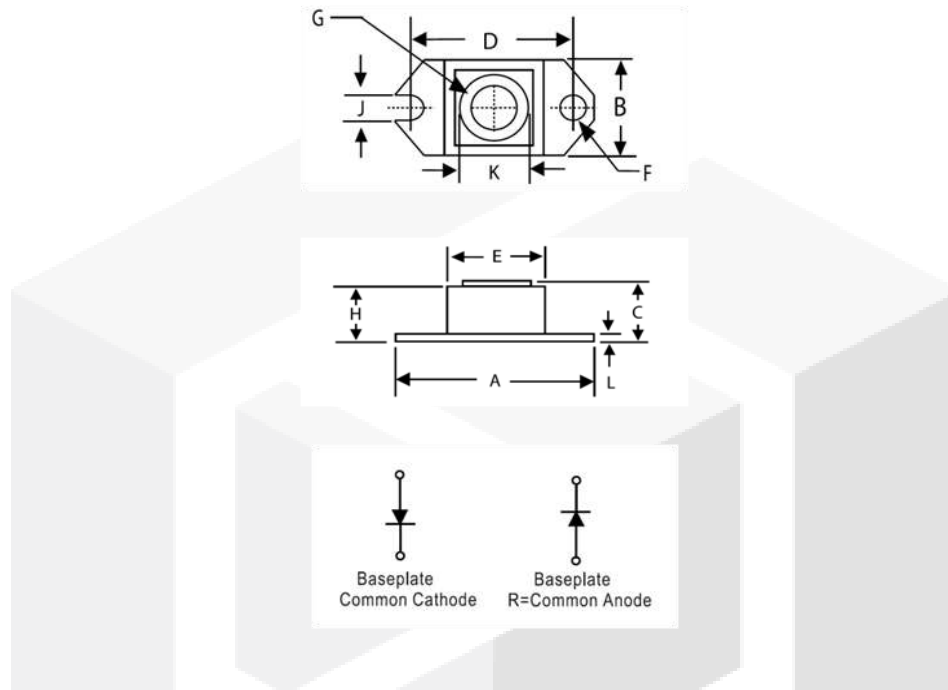


Figure .4- Typical Reverse Characteristics



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIMENSIONS					NOTE
DIM	INCHES		MM		
	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	∅
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	∅
L	.120	.130	3.05	3.30	