

## Silicon Power Schottky Diode

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

$I_F = 400\text{ A}$

### Features

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

TO-244AB Package



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

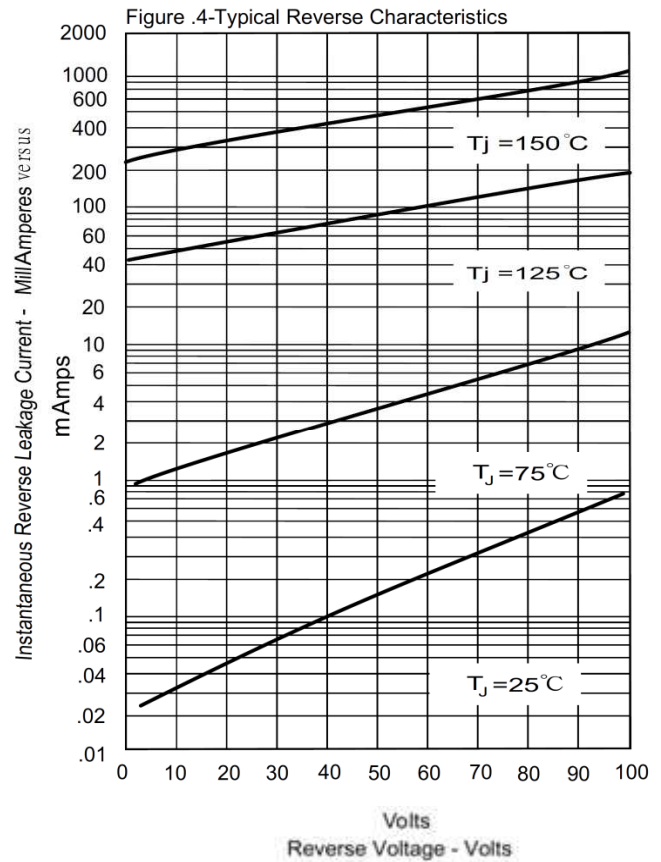
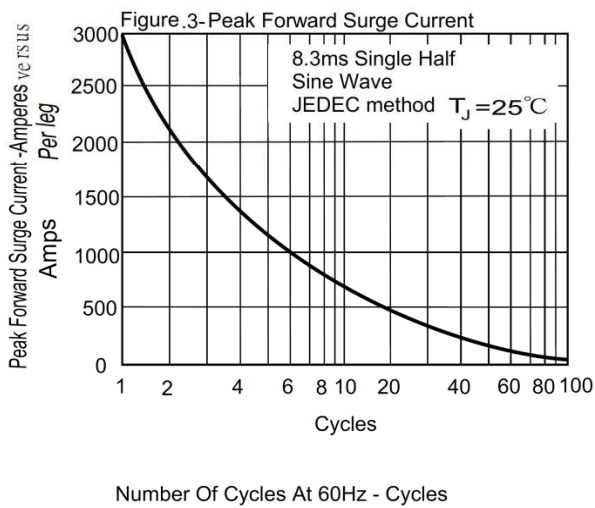
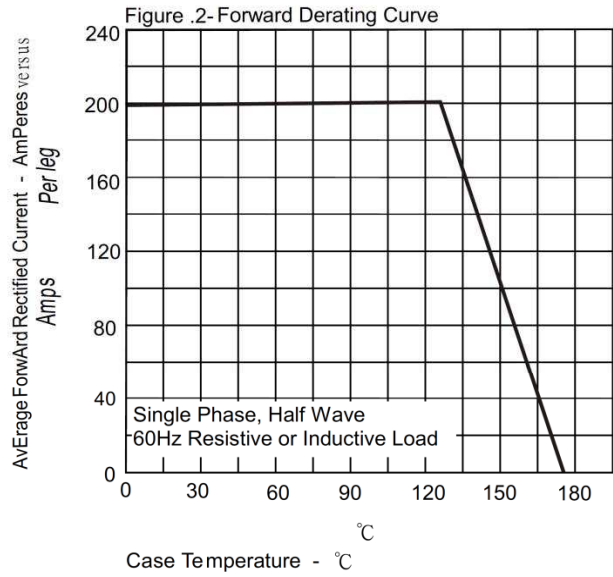
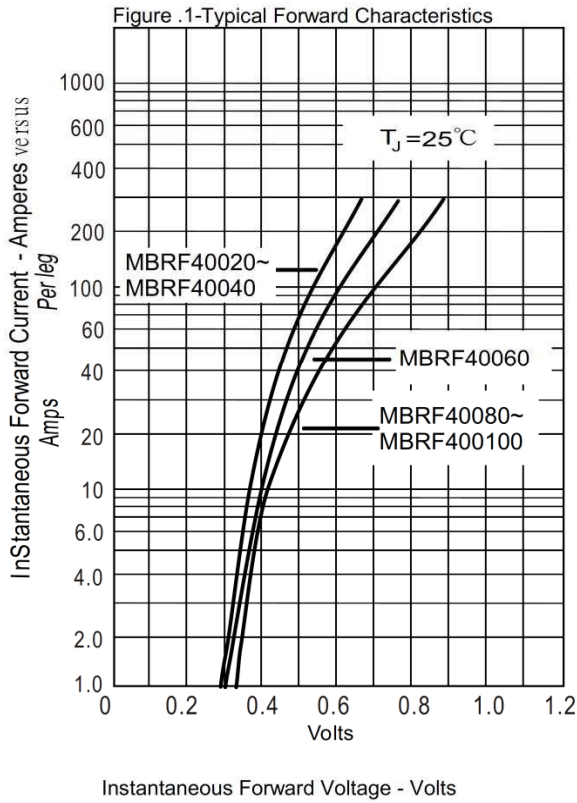
Parameter	Symbol	Conditions	MBRF40045 (R)	MBRF40060 (R)	MBRF40080 (R)	MBRF400100 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		45	60	80	100	V
RMS reverse voltage	$V_{RMS}$		32	42	56	70	V
DC blocking voltage	$V_{DC}$		45	60	80	100	V
Continuous forward current	$I_F$	$T_C \leq 125\text{ °C}$	400	400	400	400	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	3000	3000	3000	3000	A
Operating temperature	$T_j$		-40 to 175	-40 to 175	-40 to 175	-40 to 175	°C
Storage temperature	$T_{stg}$		-40 to 175	-40 to 175	-40 to 175	-40 to 175	°C

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

Parameter	Symbol	Conditions	MBRF40045 (R)	MBRF40060 (R)	MBRF40080 (R)	MBRF400100 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 200\text{ A}$ , $T_j = 25\text{ °C}$	0.65	0.75	0.84	0.84	V
Reverse current	$I_R$	$V_R = 20\text{ V}$ , $T_j = 25\text{ °C}$	5	5	5	5	mA
		$V_R = 20\text{ V}$ , $T_j = 125\text{ °C}$	200	200	200	200	

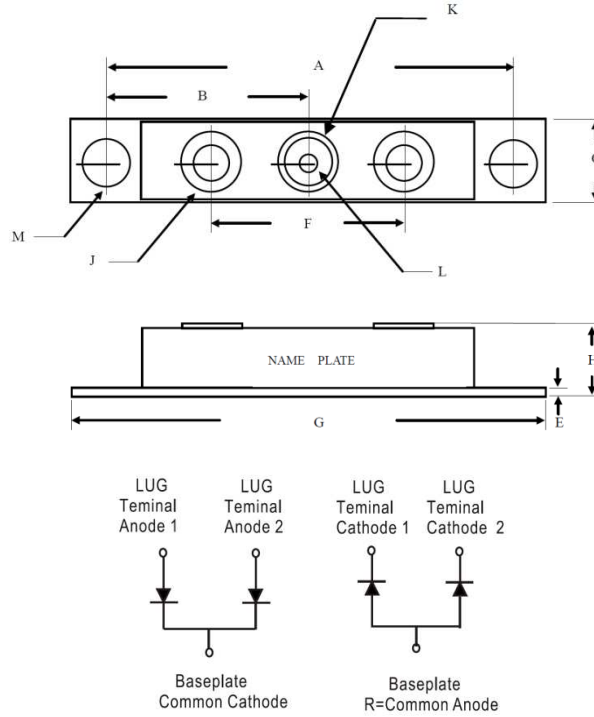
### Thermal characteristics

Thermal resistance, junction - case	$R_{thJC}$		0.35	0.35	0.35	0.35	°C/W
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## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.144	NOM	79.85	NOM
B	1.565	1.585	39.75	40.26
C	0.700	0.800	17.78	20.32
E	0.119	0.14	3.02	3.50
F	1.358	REF.	34.50	REF.
G	3.55	3.65	90.17	92.71
H	0.604	0.65	15.35	16.51
J	1/4-20 UNC FULL			
K	0.380	0.410	9.65	10.41
L	0.185	0.195	4.70	4.95
M	0.275	0.295	6.99	7.49