



# MBR6045 thru MBR60100R

## Silicon Power Schottky Diode

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

$I_F = 60\text{ A}$

### Features

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

DO-5 Package



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

Parameter	Symbol	Conditions	MBR6045 (R)	MBR6060 (R)	MBR6080 (R)	MBR60100 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		45	60	80	100	V
RMS reverse voltage	$V_{RMS}$		32	42	50	70	V
DC blocking voltage	$V_{DC}$		45	60	80	100	V
Continuous forward current	$I_F$	$T_C \leq 100\text{ °C}$	60	60	60	60	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	700	700	700	700	A
Operating temperature	$T_j$		-65 to 150	-65 to 150	-65 to 150	-65 to 150	°C
Storage temperature	$T_{stg}$		-65 to 175	-65 to 175	-65 to 175	-65 to 175	°C

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

Parameter	Symbol	Conditions	MBR6045 (R)	MBR6060(R)	MBR6080 (R)	MBR60100 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 60\text{ A}$ , $T_j = 25\text{ °C}$	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
		$V_R = 20\text{ V}$ , $T_j = 125\text{ °C}$	150	150	150	150	

### Thermal characteristics

Parameter	Symbol	Conditions	MBR6045 (R)	MBR6060 (R)	MBR6080 (R)	MBR60100 (R)	Unit
Thermal resistance, junction - case	$R_{thJC}$		1.0	1.0	1.0	1.0	°C/W

