



**America Semiconductor**

**Silicon Power  
Schottky Diode**

**MBR3545 thru  
MBR35100R**

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

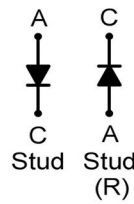
$I_F = 35\text{ A}$

**Features**

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

**Note:**

1. Standard polarity: Stud is cathode.
2. Reverse polarity (R): Stud is anode.
3. Stud is base.



DO-4 Package



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

Parameter	Symbol	Conditions	MBR3545 (R)	MBR3560 (R)	MBR3580 (R)	MBR35100 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		45	60	80	100	V
RMS reverse voltage	$V_{RMS}$		32	42	57	70	V
DC blocking voltage	$V_{DC}$		45	60	80	100	V
Continuous forward current	$I_F$	$T_C \leq 110\text{ °C}$	35	35	35	35	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	600	600	600	600	A
Operating temperature	$T_j$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	$T_{stg}$		-55 to 175	-55 to 175	-55 to 175	-55 to 175	°C

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

Parameter	Symbol	Conditions	MBR3545 (R)	MBR3560(R)	MBR3580 (R)	MBR35100 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 35\text{ A}$ , $T_j = 25\text{ °C}$	0.68	0.75	0.84	0.84	V
Reverse current	$I_R$	$V_R = 20\text{ V}$ , $T_j = 25\text{ °C}$	1.5	1.5	1.5	1.5	mA
		$V_R = 20\text{ V}$ , $T_j = 125\text{ °C}$	25	25	25	25	

**Thermal characteristics**

Thermal resistance, junction - case	$R_{thJC}$		1.5	1.5	1.5	1.5	°C/W
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