

## Silicon Power Schottky Diode

$V_{RRM} = 10\text{ V} - 30\text{ V}$

$I_F = 40\text{ A}$

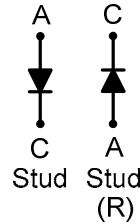
### Features

- High Surge Capability
- Types up to 30V  $V_{RRM}$

### Note:

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

DO-5 Package



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

Parameter	Symbol	Conditions	1N5832 (R)	1N5833 (R)	1N5834 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		20	30	40	V
RMS reverse voltage	$V_{RMS}$		14	21	28	V
DC blocking voltage	$V_{DC}$		20	30	40	V
Continuous forward current	$I_F$	$T_C \leq 100\text{ }^\circ\text{C}$	40	40	40	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^\circ\text{C}$ , $t_p = 8.3\text{ ms}$	800	800	800	A
Operating temperature	$T_j$		-65 to 150	-65 to 150	-65 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-65 to 175	-65 to 175	-65 to 175	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	1N5832 (R)	1N5833 (R)	1N5834 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 40\text{ A}$ , $T_j = 25\text{ }^\circ\text{C}$	0.52	0.55	0.59	V
Reverse current	$I_R$	$V_R = 10\text{ V}$ , $T_j = 25\text{ }^\circ\text{C}$	20	20	20	mA
		$V_R = 10\text{ V}$ , $T_j = 125\text{ }^\circ\text{C}$	250	250	250	

### Thermal characteristics

Parameter	Symbol	Conditions	1N5832 (R)	1N5833 (R)	1N5834 (R)	Unit
Thermal resistance, junction - case	$R_{thJC}$		1.5	1.5	1.5	$^\circ\text{C/W}$

