

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}

DO-5 Package


Maximum ratings, at $T_j = 25\text{ °C}$, 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	$T_C \leq 100\text{ °C}$	40	40	40	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$, $t_p = 8.3\text{ ms}$	800	800	800	A
Operating temperature	T_j		-65 to 150	-65 to 150	-65 to 150	°C
Storage temperature	T_{stg}		-65 to 175	-65 to 175	-65 to 175	°C

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

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

