

Silicon Power Schottky Diode

$V_{RRM} = 35\text{ V} - 45\text{ V}$

$I_F = 30\text{ A}$

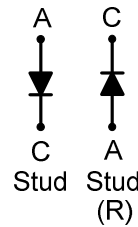
Features

- High Surge Capability
- Types up to 45 V V_{RRM}

DO-4 Package

Note:

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



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

Parameter	Symbol	Conditions	SD41 (R)	SD4145 (R)	Unit
Repetitive peak reverse voltage	V_{RRM}		35	45	V
RMS reverse voltage	V_{RMS}		25	32	V
DC blocking voltage	V_{DC}		35	45	V
Continuous forward current	I_F	$T_C \leq 100\text{ °C}$	30	30	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	A
Operating temperature	T_j		-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-55 to 175	-55 to 175	°C

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

Parameter	Symbol	Conditions	SD41 (R)	SD4145 (R)	Unit
Diode forward voltage	V_F	$I_F = 30\text{ A}$, $T_j = 25\text{ °C}$	0.68	0.68	V
Reverse current	I_R	$V_R = 35\text{ V}$, $T_j = 25\text{ °C}$	1.5	1.5	mA
		$V_R = 35\text{ V}$, $T_j = 125\text{ °C}$	25	25	

Thermal characteristics

Parameter	Symbol	Conditions	SD41 (R)	SD4145 (R)	Unit
Thermal resistance, junction - case	R_{thJC}		1.5	1.5	°C/W

