



## SD41 thru SD4145R

### 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



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

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