

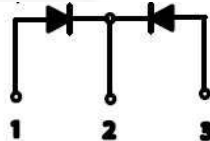
Silicon Power Schottky Diode

$V_{RRM} = 45 \text{ V}$
 $I_F = 80 \text{ A}$

Features

- High Surge Capability
- Types from 45 V to 100V V_{RRM}
- Not ESD Sensitive

D61-3SM Package



Maximum ratings, at $T_j = 25 \text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	FST8345SM	FST8360SM	FST8380SM	FST83100SM	Unit
Repetitive peak reverse voltage	V_{RRM}		45	60	80	100	
RMS reverse voltage	V_{RMS}		32	42	56	70	
DC blocking voltage	V_{DC}		45	60	80	100	V
Continuous forward current	I_F	$T_C \leq 110 \text{ }^\circ\text{C}$	80	80	80	80	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	800	A
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	FST8345SM	FST8360SM	FST8380SM	FST83100SM	Unit
Diode forward voltage	V_F	$I_F = 80 \text{ A}$, $T_j = 25 \text{ }^\circ\text{C}$	0.65	0.75	0.84	0.84	V
Reverse current	I_R	$V_R = 20 \text{ V}$, $T_j = 25 \text{ }^\circ\text{C}$ $V_R = 20 \text{ V}$, $T_j = 125 \text{ }^\circ\text{C}$	1.5 500	1.5 500	1.5 500	1.5 500	mA

Thermal characteristics

Parameter	Symbol	Conditions	FST8345SM	FST8360SM	FST8380SM	FST83100SM	Unit
Thermal resistance, junction - case	R_{thJC}		1.2	1.2	1.2	1.2	$^\circ\text{C/W}$

