

## Silicon Power Schottky Diode

$V_{RRM} = 10\text{ V} - 100\text{ V}$

$I_F = 60\text{ A}$

### Features

- High Surge Capability
- Types up to 100 V  $V_{RRM}$

D61-3SM Package



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

Parameter	Symbol	Conditions	FST6310SM	FST6315SM	FST6320SM	FST6330SM	FST6335SM	Unit
Repetitive peak reverse voltage	$V_{RRM}$		10	15	20	30	35	V
RMS reverse voltage	$V_{RMS}$		7	10	14	21	25	V
DC blocking voltage	$V_{DC}$		10	15	20	30	35	V
Continuous forward	$I_F$	$T_C \leq 105\text{ °C}$	60	60	60	60	60	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	600	600	600	A
Operating temperature	$T_j$		-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	°C
Storage temperature	$T_{stg}$		-40 to 125	-40 to 125	-40 to 125	-40 to 125	-40 to 125	°C

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

Parameter	Symbol	Conditions	FST6310SM	FST6315SM	FST6320SM	FST6330SM	FST6335SM	Unit
Diode forward voltage	$V_F$	$I_F = 60\text{ A}$ , $T_j = 25\text{ °C}$	0.55	0.55	0.55	0.55	0.55	V
Reverse current	$I_R$	$V_R = 10\text{ V}$ , $T_j = 25\text{ °C}$	3	3	3	3	3	mA
		$V_R = 10\text{ V}$ , $T_j = 125\text{ °C}$	500	500	500	500	500	

### Thermal characteristics

Thermal resistance, junction - case	$R_{thJC}$		1.2	1.2	1.2	1.2	1.2	°C/W
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Figure .1-Typical Forward Charac teristics

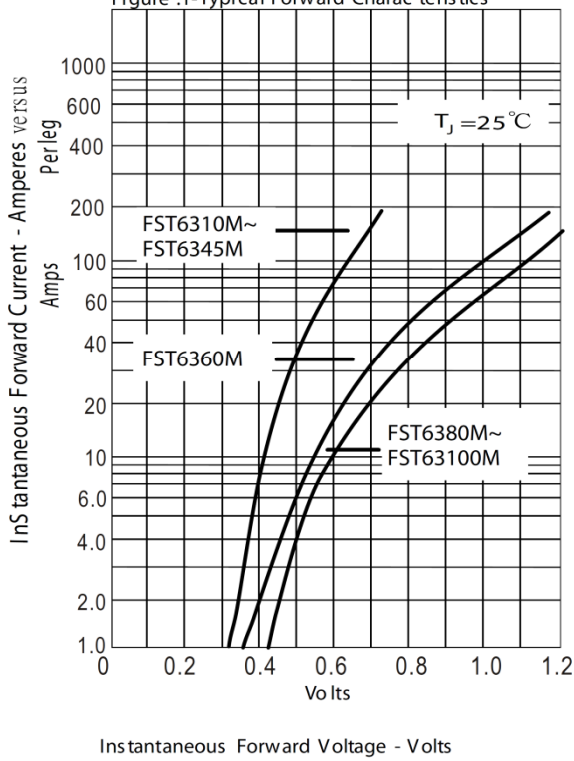


Figure .2- Forward Deratig Curve

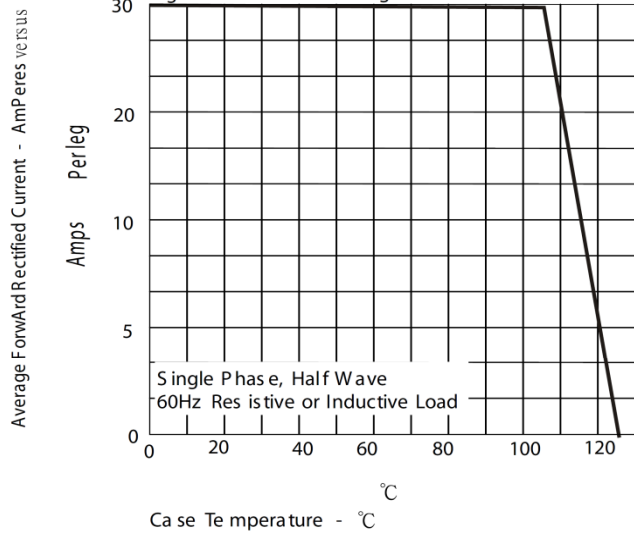


Figure .4-Typical Reverse Charac teristics

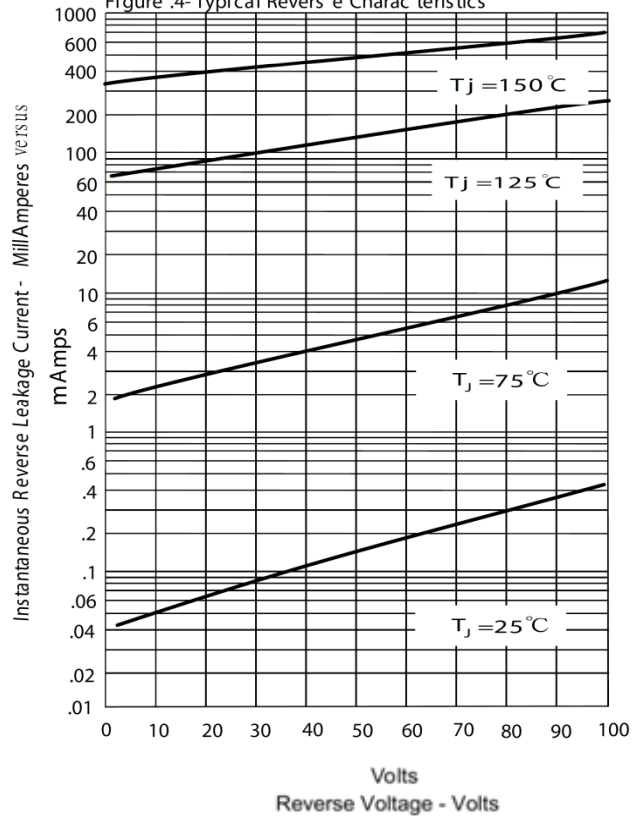


Figure .3- Peak Forward Surge Current

