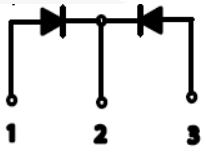
Silicon Power Schottky Diode

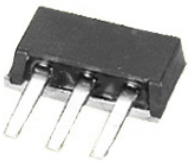
V_{RRM} = 20 V - 40 V
I_F = 80 A

Features

- High Surge Capability
- Types from 20 V to 40V V_{RRM}
- Types up to 100V V_{RRM}

D61-3SM Package





RoHS COMPLIANT

REACH COMPLIANCE

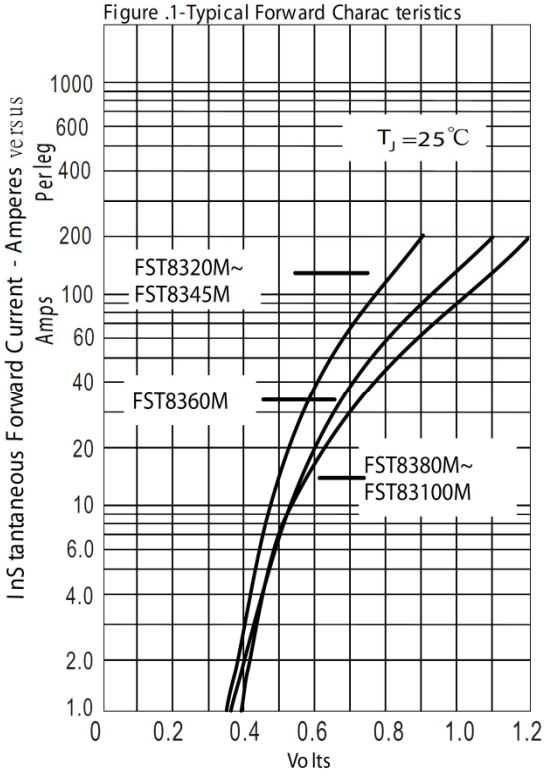
Maximum ratings, at T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	FST8320SM	FST78330SM	FST8335SM	FST8340SM	Unit
Repetitive peak reverse voltage	V_{RRM}		20	30	35	40	V
RMS reverse voltage	V_{RMS}		14	21	35	28	V
DC blocking voltage	V_{DC}		20	30	35	40	V
Continuous forward current	I_F	$T_C \leq 110$ °C	80	80	80	80	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	800	800	800	800	A
Operating temperature	T_j		-40 to 175	-40 to 175	-40 to 175	-40 to 175	°C
Storage temperature	T_{stg}		-40 to 175	-40 to 175	-40 to 175	-40 to 175	°C

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

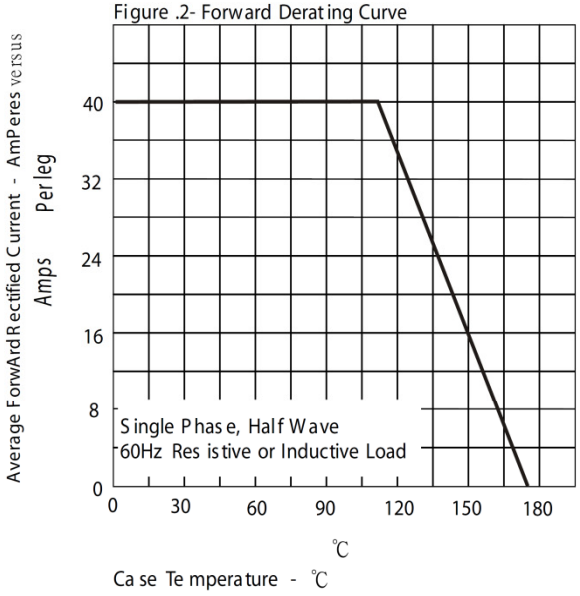
Parameter	Symbol	Conditions	FST8320SM	FST8330SM	FST8335SM	FST78340SM	Unit
Diode forward voltage	V_F	I_F = 80 A, T_j = 25 °C	0.65	0.65	0.65	0.65	V
Reverse current	I_R	V_R = 20 V, T_j = 25 °C	1.5	1.5	1.5	1.5	mA
		V_R = 20 V, T_j = 125 °C	500	500	500	500	
Thermal characteristics							
Thermal resistance, junction - case	R_{thJC}		1.2	1.2	1.2	1.2	°C/W

Figure .1-Typical Forward Charac teristics



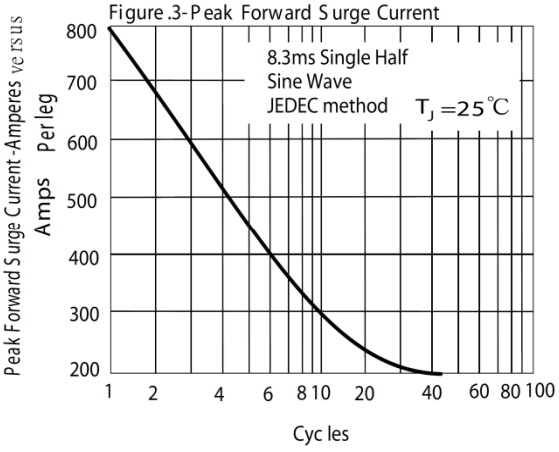
Instantaneous Forward Voltage - Volts

Figure .2- Forward Derating Curve



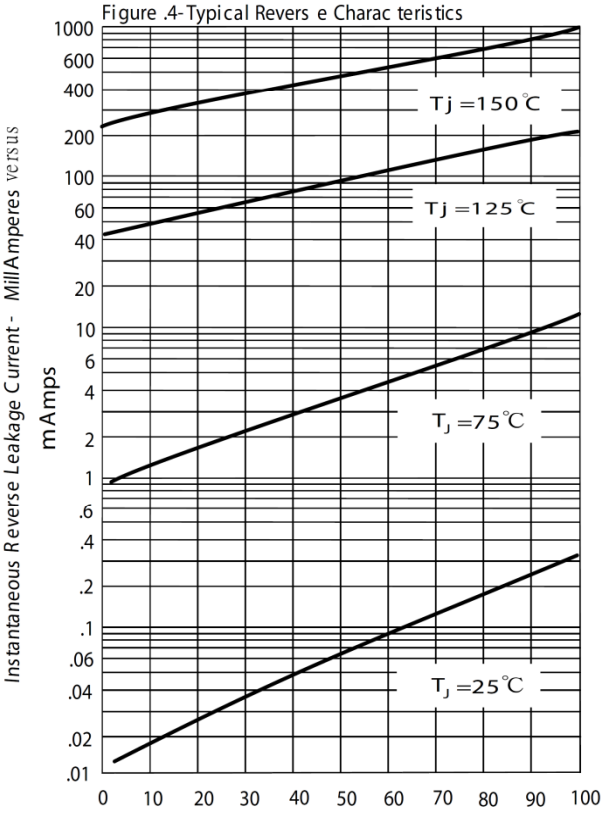
Case Temperature - °C

Figure .3-Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Charac teristics



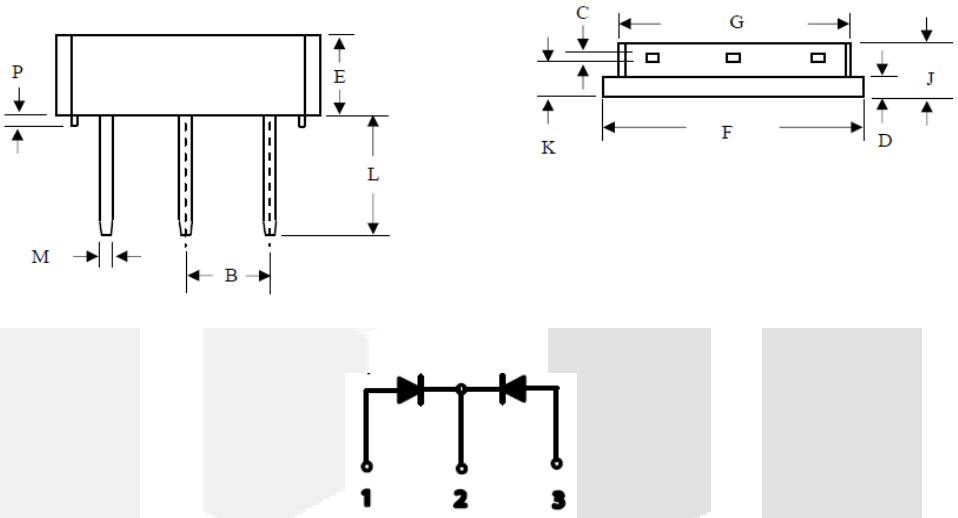
Reverse Voltage - Volts

Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

MINI MODE

D61 - 3SM



	Inches		Millimeters	
	Min	Max	Min	Max
B	0.200	NOM	5.08	NOM
C	0.027	0.037	0.69	0.94
D	0.088	0.098	2.24	2.49
E	0.350	0.370	8.89	9.40
F	0.777	0.797	19.74	20.24
G	0.695	0.715	17.65	18.16
J	0.240	0.260	6.10	6.60
K	0.115	0.135	2.92	3.43
L	0.457	0.477	11.61	12.12
M	0.065	0.085	1.65	2.16
P	0.015	0.025	0.38	0.64