FST7320M thru FST7340M

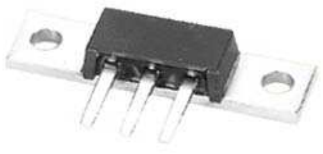
Silicon Power Schottky Diode

V_{RRM} = 20 V - 100 V
I_F = 70 A

Features

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

D61-3M Package



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

Parameter	Symbol	Conditions	FST7320M	FST7330M	FST7335M	FST7340M	Unit
Repetitive peak reverse voltage	V_{RRM}		20	30	35	40	V
RMS reverse voltage	V_{RMS}		14	21	25	28	V
DC blocking voltage	V_{DC}		20	30	35	40	V
Continuous forward current	I_F	T_C ≤ 100 °C	70	70	70	70	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	600	600	600	600	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	FST7320M	FST7330M	FST7335M	FST7340M	Unit
Diode forward voltage	V_F	I_F = 70 A, T_j = 25 °C	0.55	0.55	0.55	0.55	V
Reverse current	I_R	V_R = 20 V, T_j = 25 °C V_R = 20 V, T_j = 125 °C	5 500	5 500	5 500	5 500	mA
Thermal characteristics							
Thermal resistance, junction - case	R_{thJC}		1.2	1.2	1.2	1.2	°C/W

Figure .1-Typical Forward Characteristics

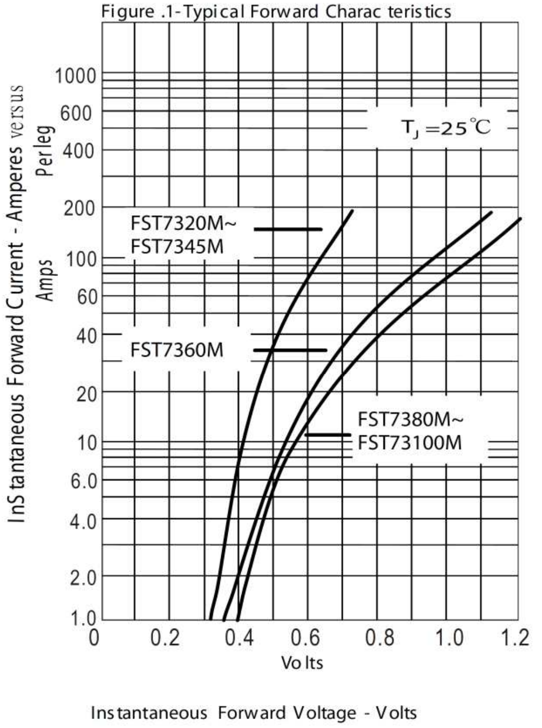


Figure .2 - Forward Derating Curve

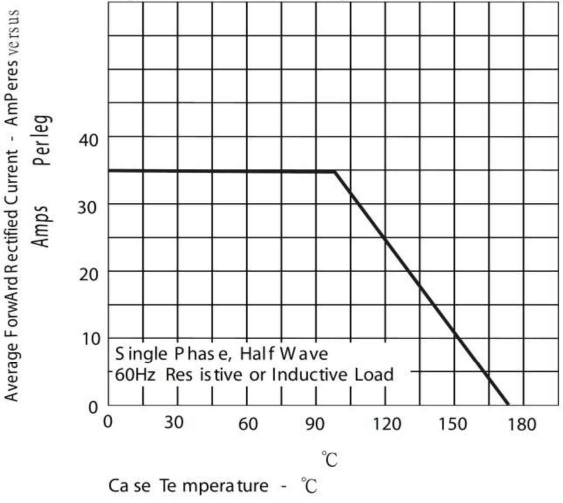


Figure .3- Peak Forward Surge Current

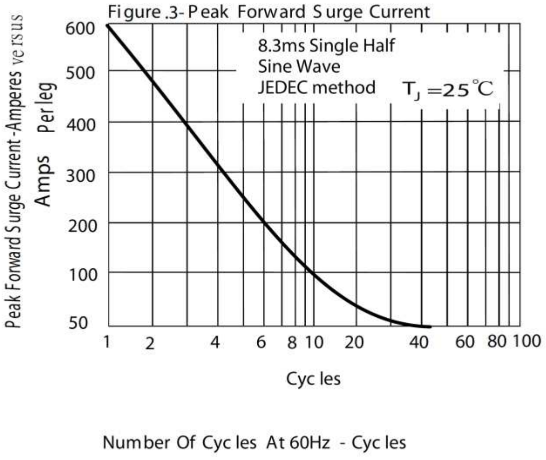


Figure .4-Typical Reverse Characteristics