

Silicon Power Schottky Diode

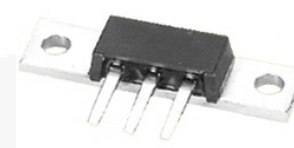
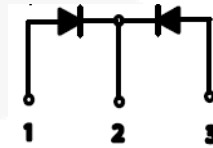
$V_{RRM} = 45\text{ V} - 100\text{ V}$

$I_{F(AV)} = 80\text{ A}$

Features

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

D61-3M Package



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

Parameter	Symbol	Conditions	FST8345M	FST8360M	FST8380M	FST83100M	Unit
Repetitive peak reverse voltage	V_{RRM}		45	60	80	100	V
RMS reverse voltage	V_{RMS}		32	42	56	70	V
DC blocking voltage	V_{DC}		45	60	80	100	V
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	FST8345M	FST8360M	FST8380M	FST83100M	Unit
Average forward current (per pkg)	$I_{F(AV)}$	$T_C = 125\text{ }^\circ\text{C}$	80	80	80	80	A
Peak forward surge current (per leg)	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	600	600	600	600	A
Maximum instantaneous forward voltage (per leg)	V_F	$I_{FM} = 40\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$	0.72	0.78	0.84	0.84	V
Maximum Instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	$T_j = 25\text{ }^\circ\text{C}$	1	1	1	1	mA
		$T_j = 100\text{ }^\circ\text{C}$	10	10	10	10	
		$T_j = 150\text{ }^\circ\text{C}$	30	30	30	30	

Thermal characteristics

Thermal resistance, junction - case (per leg)	$R_{\theta JC}$		1.10	1.10	1.10	1.10	$^\circ\text{C/W}$
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Figure .1- Typical Forward Characteristics

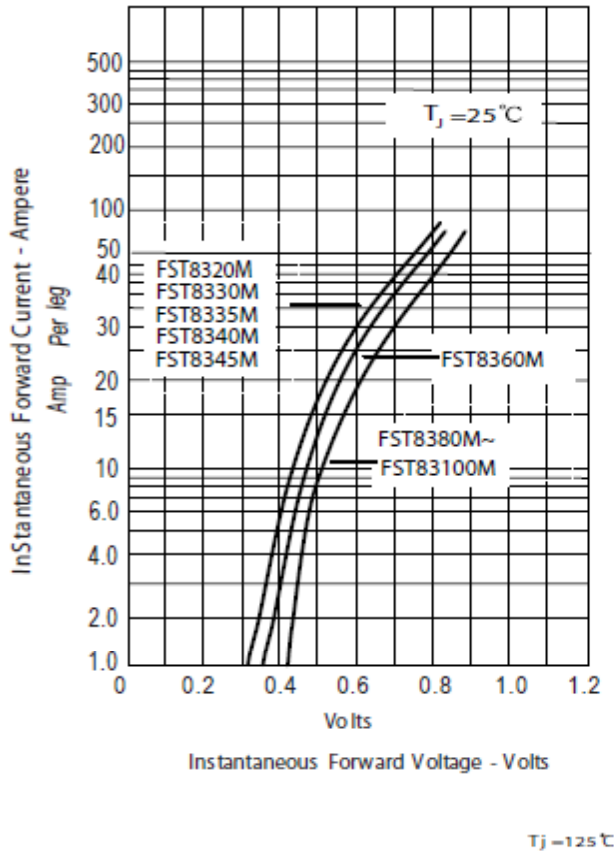


Figure .2- Forward Derating Curve

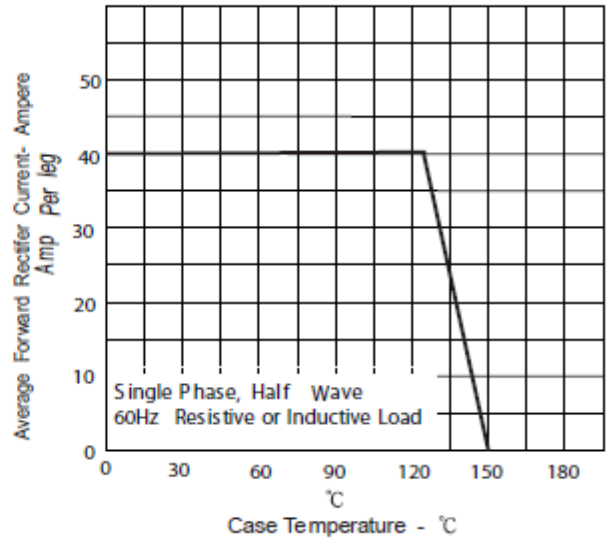


Figure.3-Peak Forward Surge Current

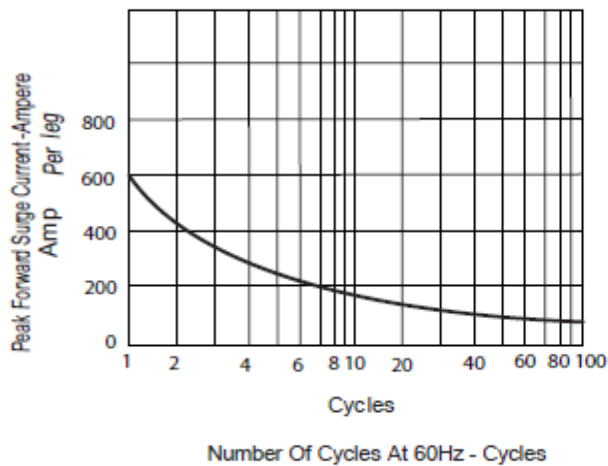
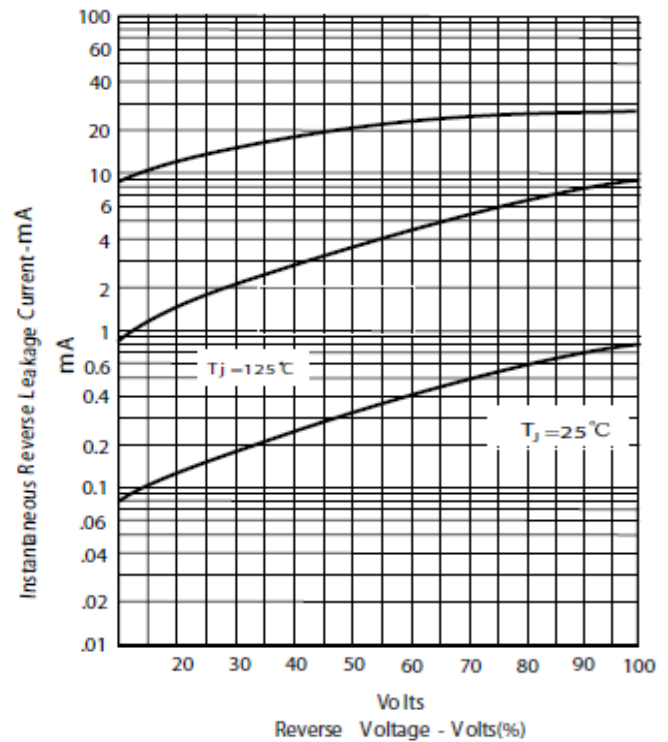
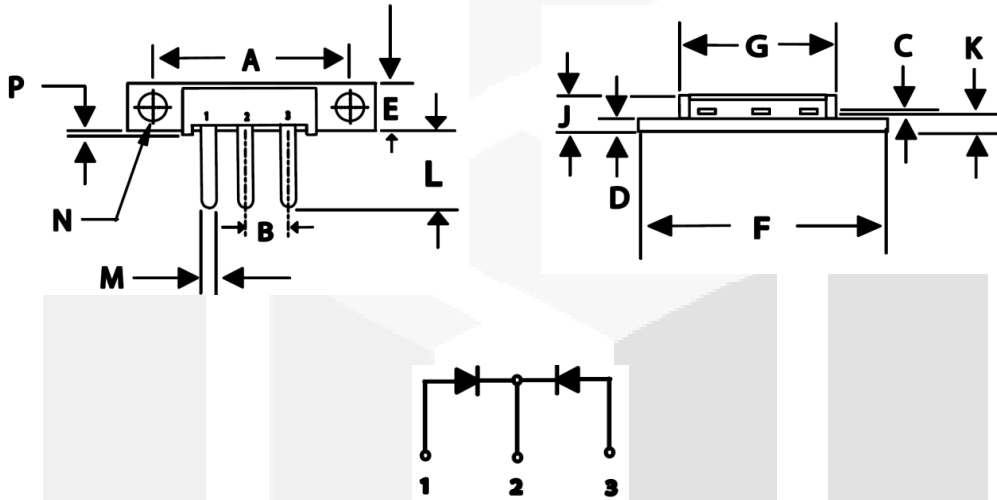


Figure .4 Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIMENSIONS					
DIM	IN CHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.180	1.195	29.97	30.35	
B	.200	NOM	5.08	NOM	2PL
C	.027	.037	0.69	0.94	
D	.088	.098	2.24	2.49	
E	.350	.370	8.89	9.40	
F	1.490	1.510	37.85	38.35	
G	.695	.715	17.65	18.16	
J	.24	.26	6.1	6.6	
K	.115	.135	2.92	3.43	
L	.457	.477	11.61	12.12	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	∅
P	.015	.025	0.38	0.64	