

M•C•C

Micro Commercial Components
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FST8360SL

THRU

FST83100SL

Features

- Metal of siliconrectifier, majority carrier conductor
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

Maximum Ratings

- Operating Temperature: -40°C to +175°C
- Storage Temperature: -40°C to +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FST8360SL	60V	42V	60V
FST8380SL	80V	56V	80V
FST83100SL	100V	70V	100V

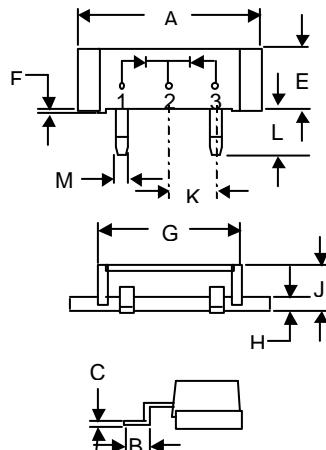
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	80 A	$T_c = 110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	800A	8.3ms, half sine
Maximum Instantaneous Forward Voltage FST8360SL FST8380SL-83100SL	V_F	.75 V .84 V	$I_{FM} = 40.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.5mA 35mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	1450pF	Measured at 1.0MHz, $V_R=5.0\text{V}$

Pulse Test: Pulse Width 300μsec, Duty Cycle 2%

**80 Amp
Schottky Barrier
Rectifier
60 to 100 Volts**

MINIMOD-SL

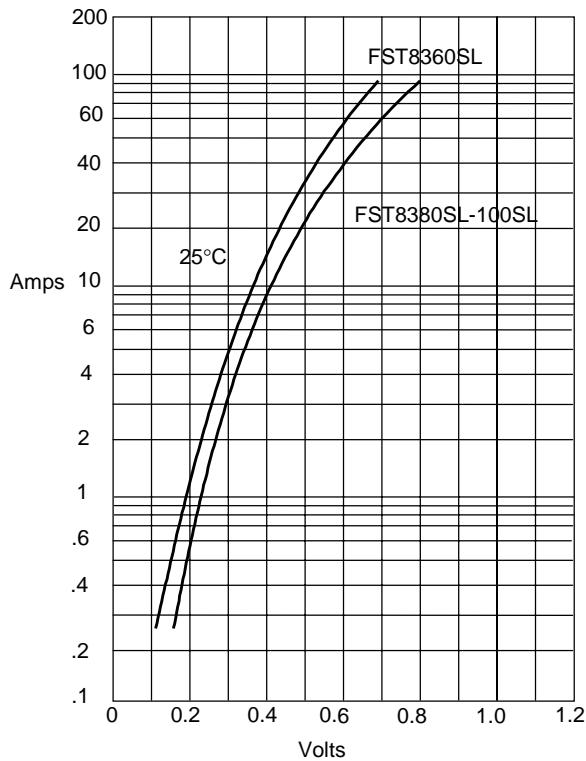


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.777	.797	19.74	20.24	
B	.110	.120	2.79	3.04	
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	.015	.025	0.38	0.64	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.200	REF	5.08	REF	2PL
L	.230	.250	5.84	6.35	
M	.065	.085	1.65	2.16	

FST8360SL thru FST83100SL

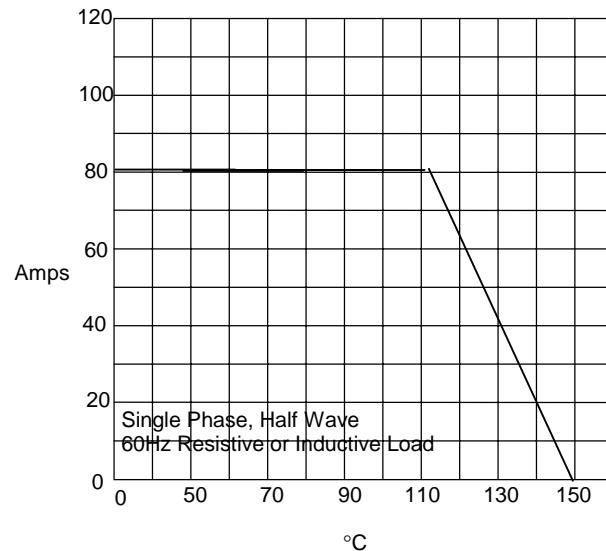
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Figure 1
Typical Forward Characteristics



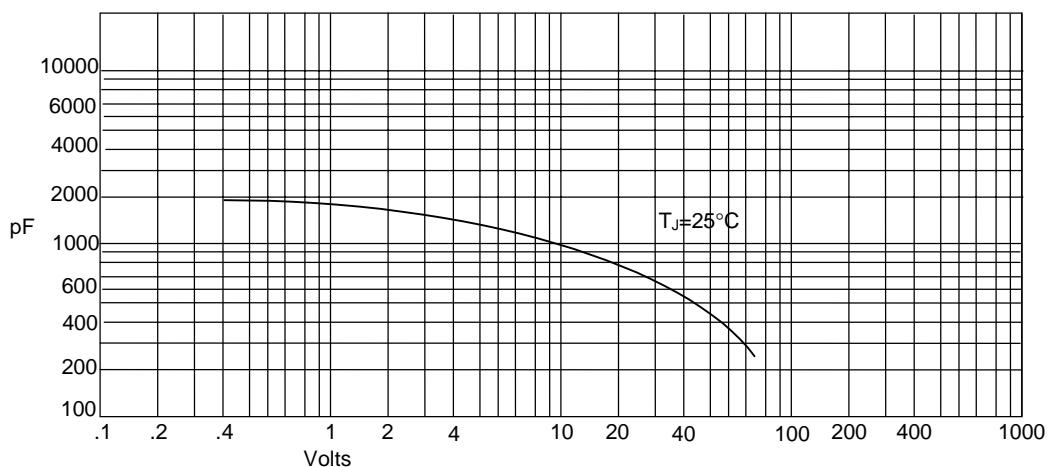
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Case Temperature - °C

Figure 3
Junction Capacitance

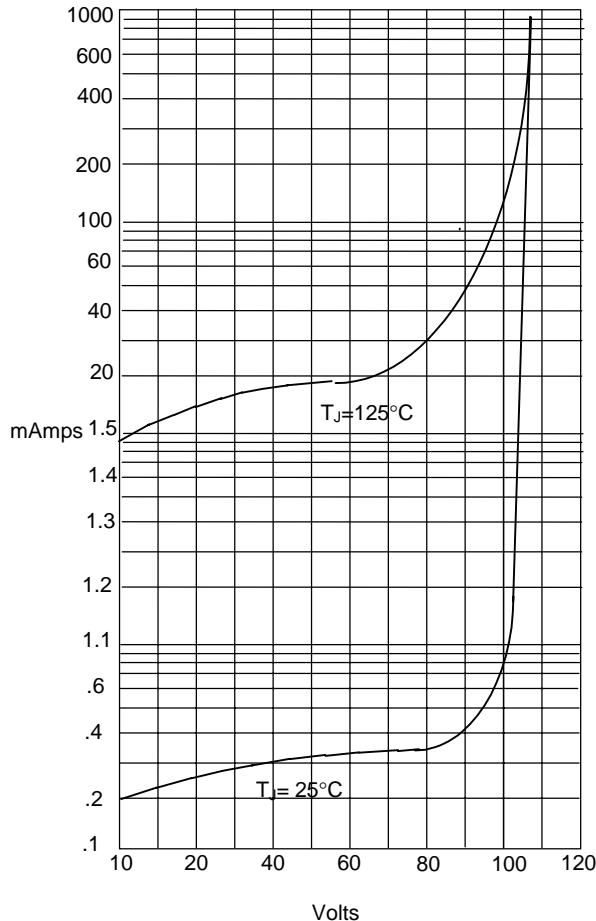


Junction Capacitance - pF versus
Reverse Voltage - Volts

FST8360SL thru FST83100SL

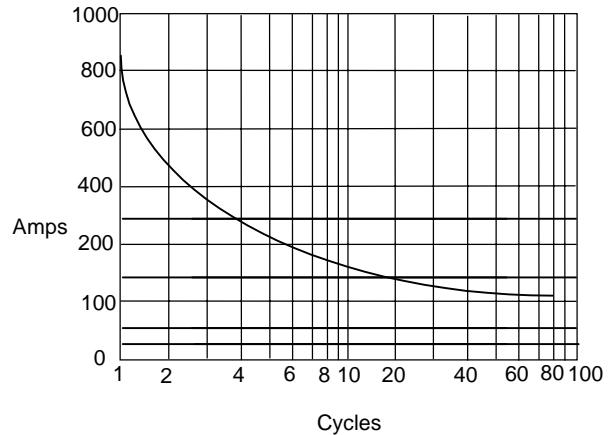
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Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles