

# MCC

Micro Commercial Components  
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## FST8320SL

### THRU

## FST8345SL

## 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
FST8320SL	20V	14V	20V
FST8330SL	30V	21V	30V
FST8335SL	35V	24.5V	35V
FST8340SL	40V	28V	40V
FST8345SL	45V	31.5V	45V

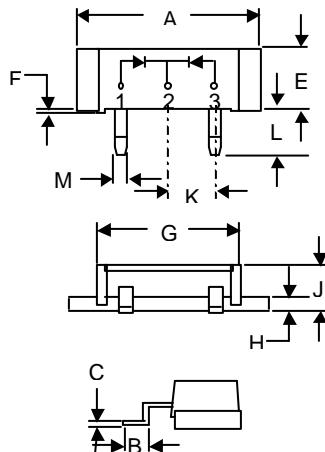
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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 FST8320SL-8345SL	$V_F$	.53 V	$I_{FM} = 40.0\text{A}; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	3.0mA 500mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	2100pF	Measured at 1.0MHz, $V_R=5.0\text{V}$

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

**80 Amp  
Schottky Barrier  
Rectifier  
20 to 45 Volts**

## MINIMOD-SL

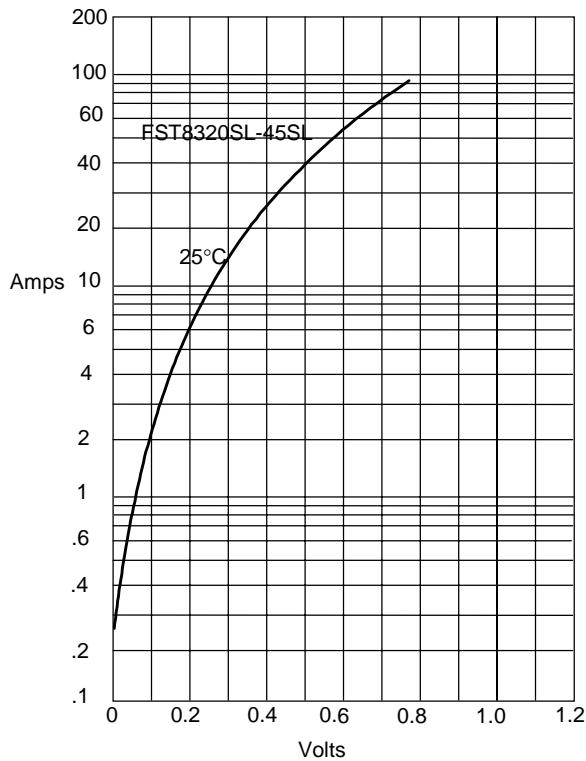


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.777	.797	19.74	20.24	
B	.110	.120	2.79	3.04	
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	.015	.025	0.38	0.64	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.200	REF	5.08	REF	2PL
L	.230	.250	5.84	6.35	
M	.065	.085	1.65	2.16	

# FST8320SL thru FST8345SL

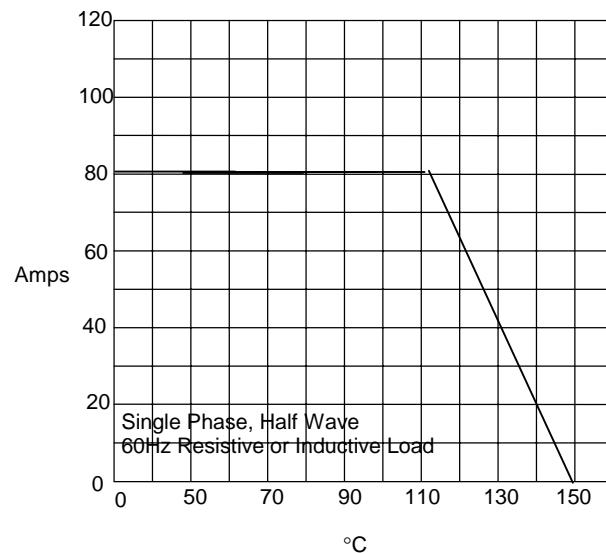
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Figure 1  
Typical Forward Characteristics



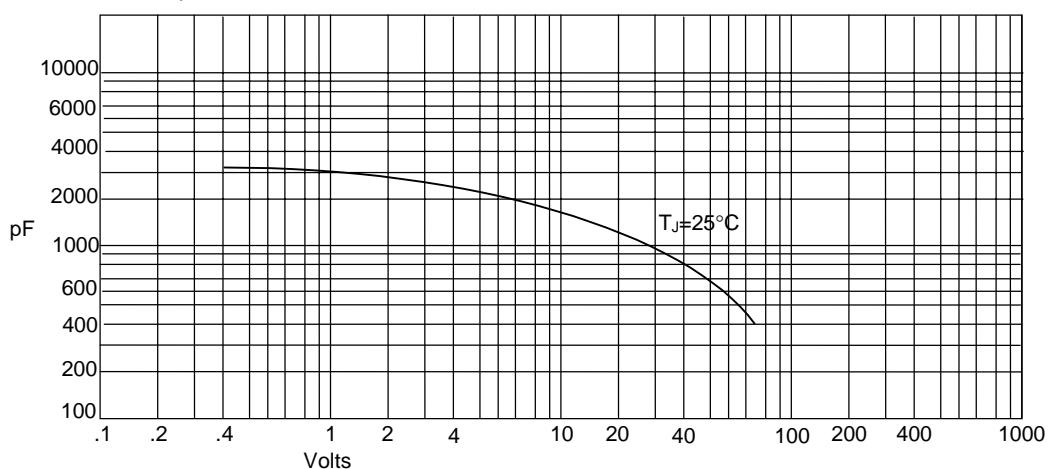
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

Figure 3  
Junction Capacitance

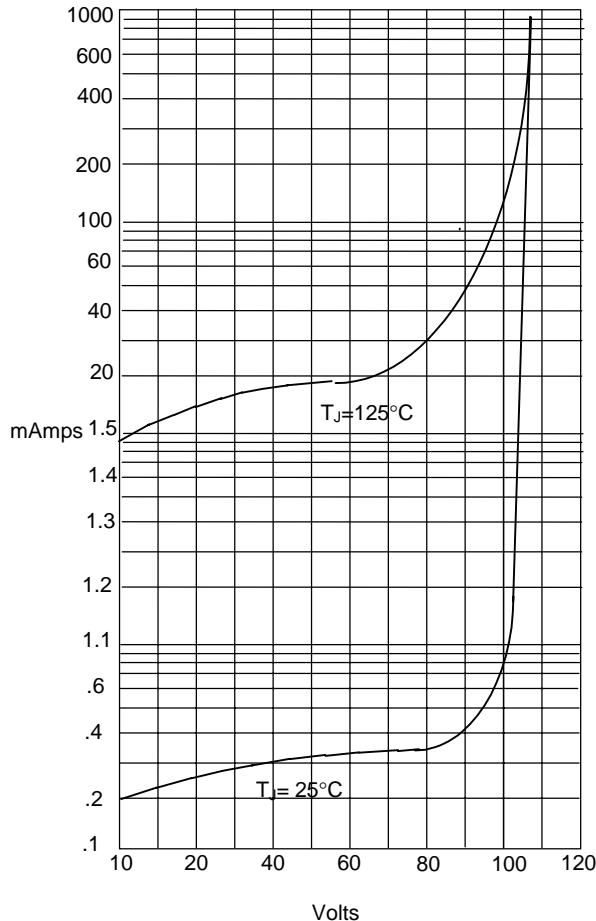


Junction Capacitance - pF versus  
Reverse Voltage - Volts

## FST8320SL thru FST8345SL

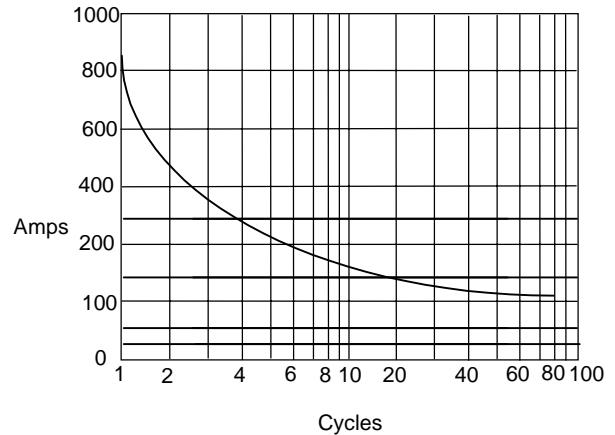
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Figure 4  
Typical Reverse Characteristics



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