



Micro Commercial Components  
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**FST8420SL  
 THRU  
 FST8445SL**

**Features**

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

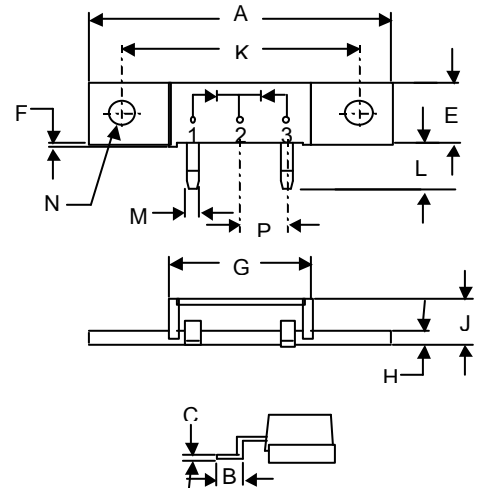
**80 Amp  
 Schottky Barrier  
 Rectifier  
 20 to 45 Volts**

**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
FST8420SL	20V	14V	20V
FST8430SL	30V	21V	30V
FST8435SL	35V	24.5V	35V
FST8440SL	40V	28V	40V
FST8445SL	45V	31.5V	45V

**MINIMOD-SL**



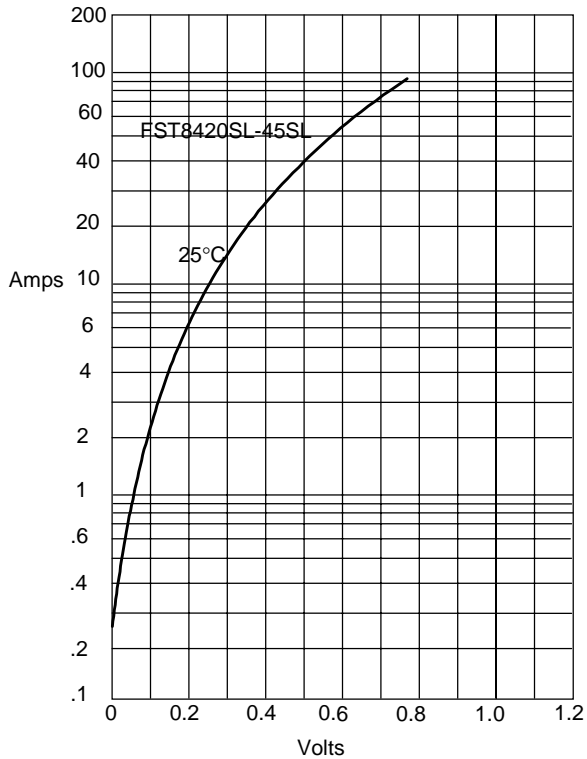
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

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 FST8420SL-8445SL	$V_F$	.63 V	$I_{FM} = 40.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	3.0nA 500nA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	2100pF	Measured at 1.0MHz, $V_R=5.0\text{V}$

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.490	1.510	37.85	38.35	
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	1.180	1.195	29.97	30.35	
L	.230	.250	5.84	6.35	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	Ø
P	.200	REF	5.08	REF	

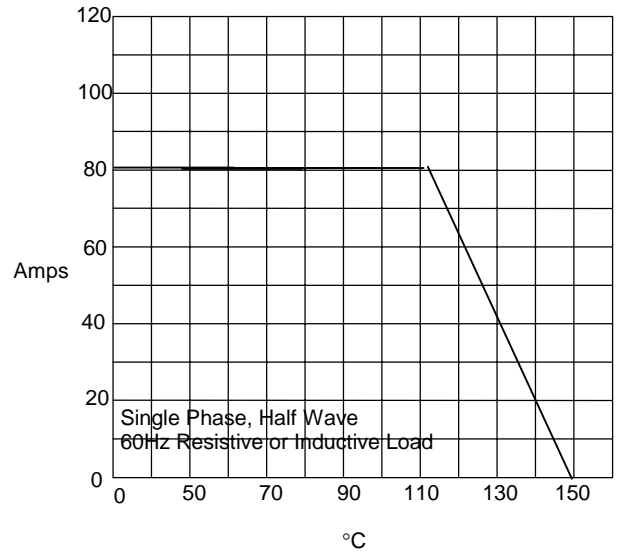
Pul se Test: Pulse Width 300µsec, Duty Cycle 2%

Figure 1  
Typical Forward Characteristics



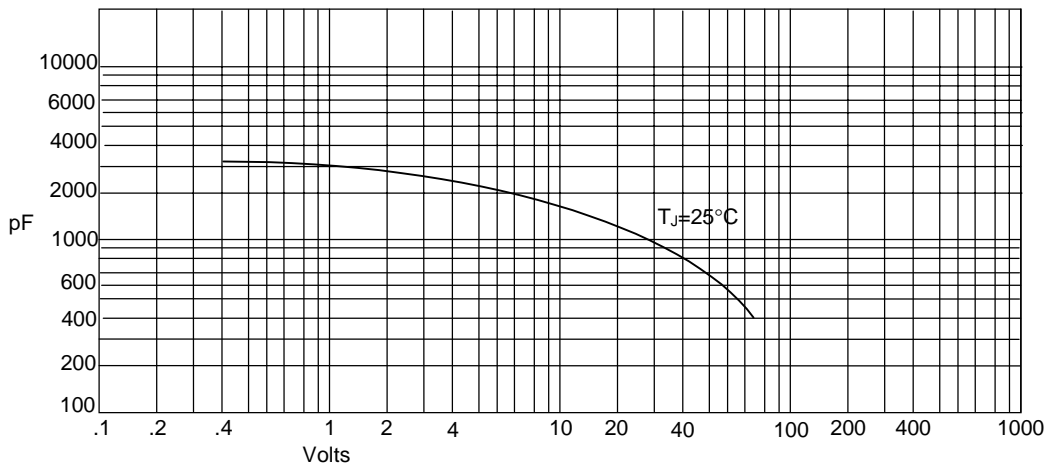
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

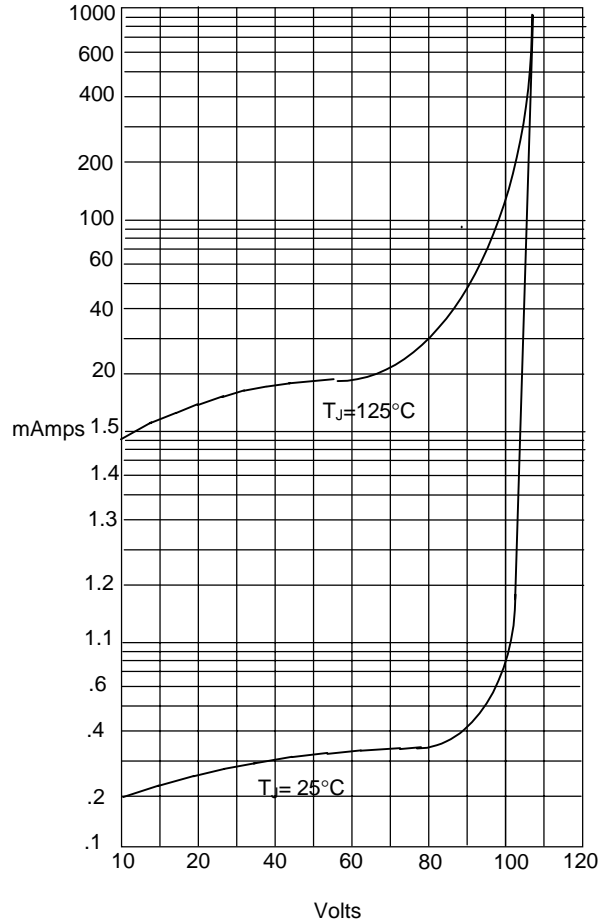
Figure 3  
Junction Capacitance



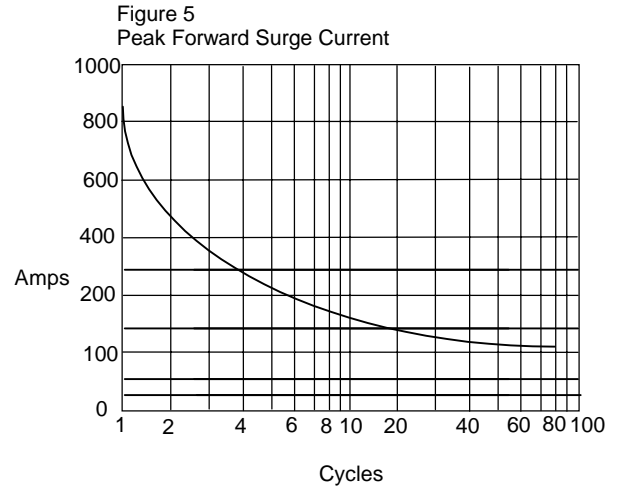
Junction Capacitance - pF versus  
Reverse Voltage - Volts



Figure 4  
Typical Reverse Characteristics



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



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