Micro Commercial Components
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FST8420SL THRU FST8445SL

80 Amp Schottky Barrier Rectifier 20 to 45 Volts

Features

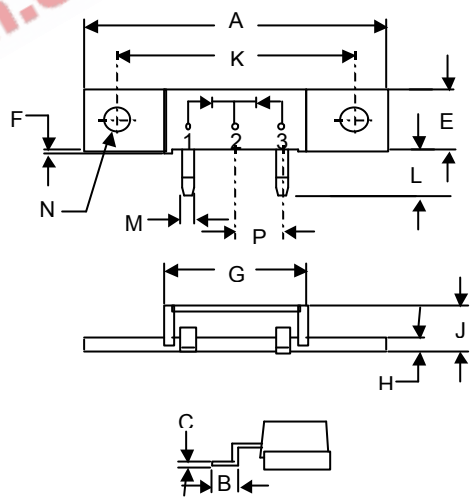
- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

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

MINIMOD-SL



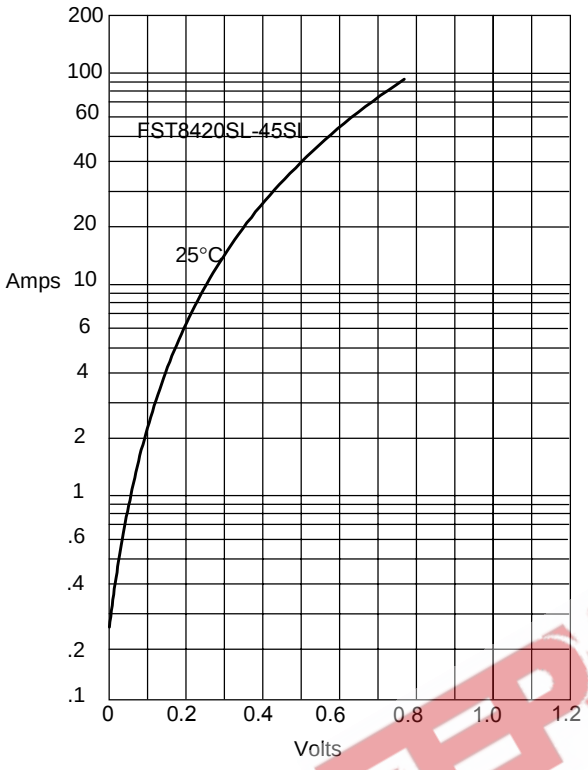
DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
A	1.490	1.510	37.85	38.35	
B	.110	.120	2.79	3.04	
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	.015	.025	0.38	0.64	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	1.180	1.195	29.97	30.35	
L	.230	.250	5.84	6.35	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	Ø
P	.200	REF	5.08	REF	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	80 A	T_C = 110°C
Peak Forward Surge Current	I_{FSM}	800A	8.3ms, half sine
Maximum Instantaneous Forward Voltage FST8420SL-8445SL	V_F	.63 V	I_{FM} = 40.0A; T_J = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	3.0mA 500mA	T_J = 25°C T_J = 125°C
Typical Junction Capacitance	C_J	2100pF	Measured at 1.0MHz, V_R=5.0V

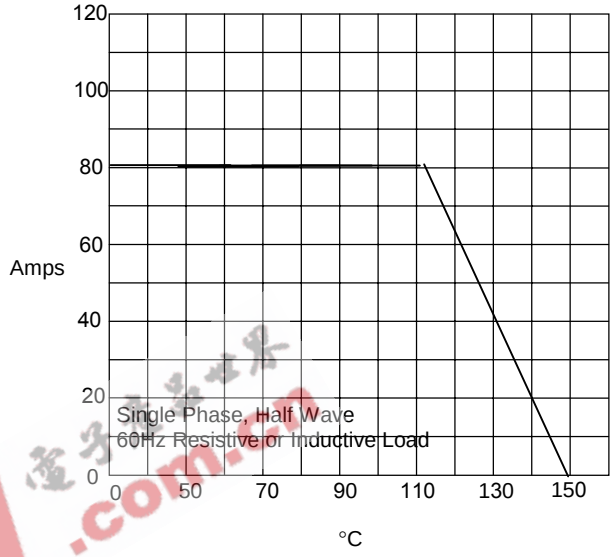
Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

Figure 1
Typical Forward Characteristics



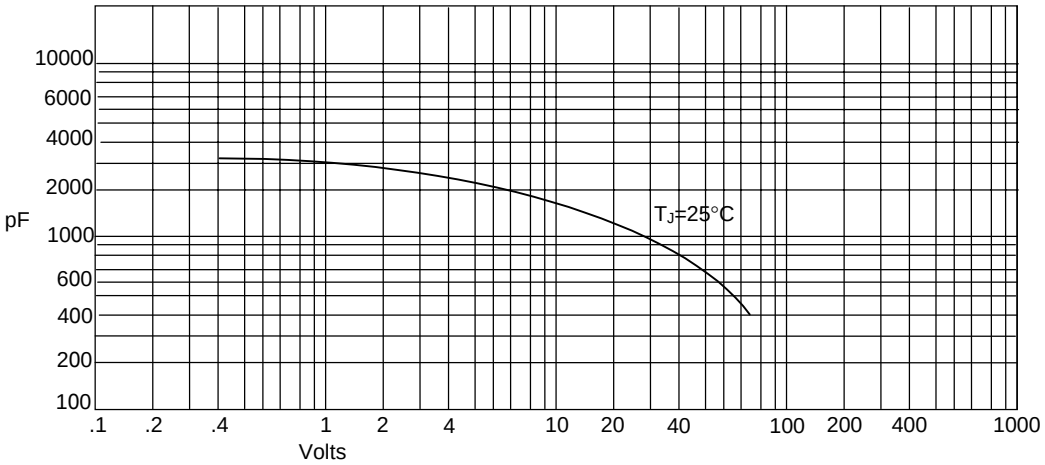
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



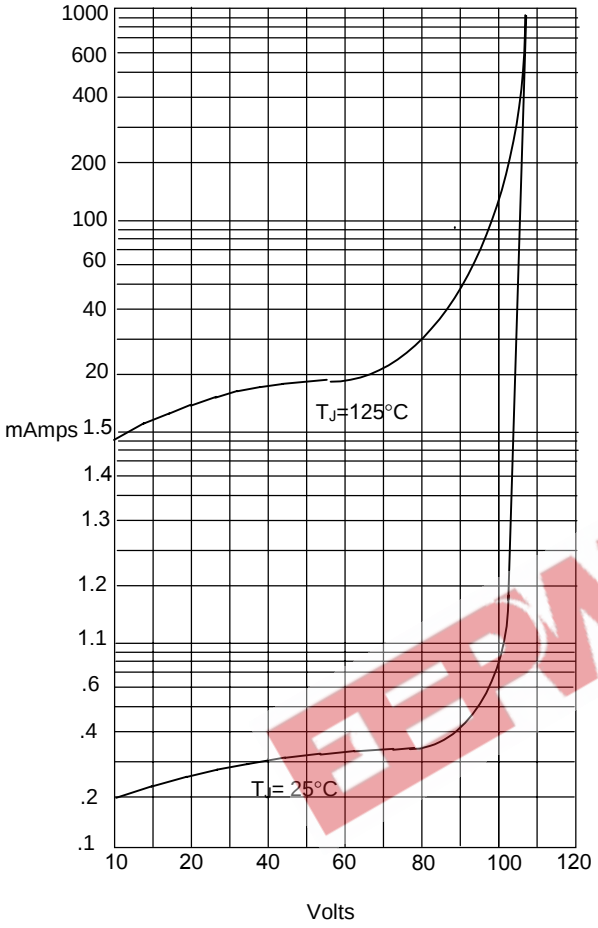
Average Forward Rectified Current - Amperes *versus*
Case Temperature - °C

Figure 3
Junction Capacitance



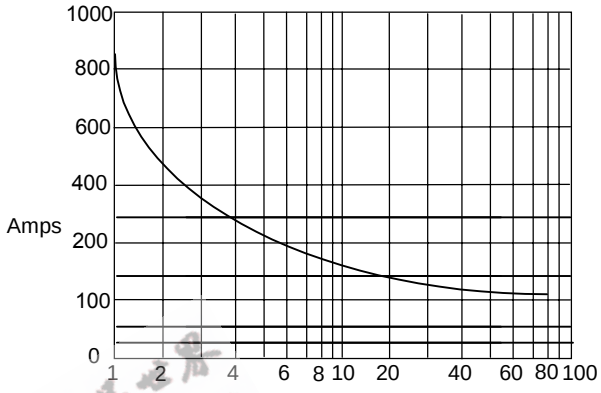
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



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

Figure 5
Peak Forward Surge Current



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