



Micro Commercial Components  
 21201 Itasca Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# FST12020 THRU FST120100

## 120 Amp Schottky Barrier Rectifier 20 to 100 Volts

### Features

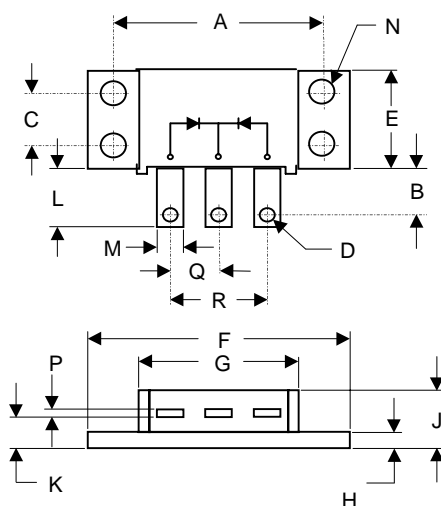
- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

### Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FST12020	20V	14V	20V
FST12030	30V	21V	30V
FST12035	35V	24.5V	35V
FST12040	40V	28V	40V
FST12045	45V	31.5V	45V
FST12060	60V	42V	60V
FST12080	80V	56V	80V
FST120100	100V	70V	100V

### POWERMOD



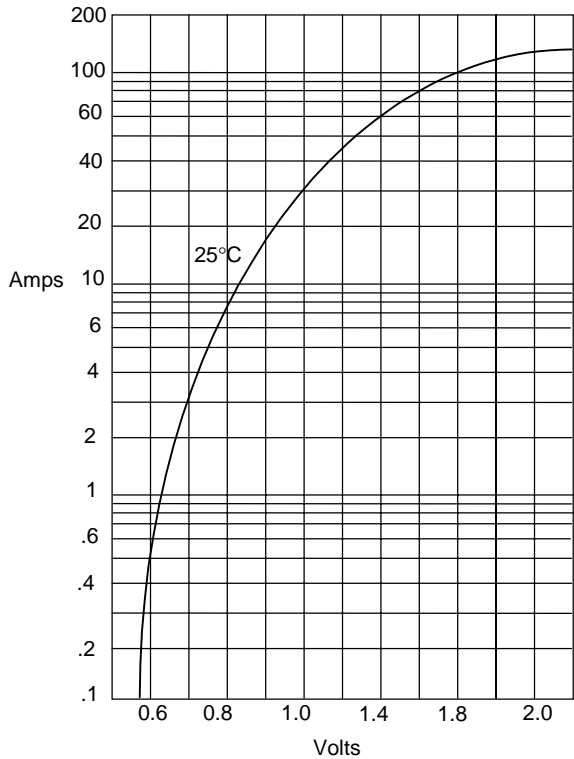
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	120 A	$T_A = 135^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	1200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$		$I_{FM} = 60.0A;$ $T_A = 25^\circ\text{C}$
FST12020-12045		.63 V	
FST12060		.75 V	
FST12080-120100		.84 V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	2mA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	340pF	Measured at 1.0MHz, $V_R=4.0V$

DIM	DIMENSIONS				NOTE
	INCH ES		MM		
	MIN	MAX	MIN	MAX	
A	1.995	2.005	50.67	50.93	
B	.330	.325	7.62	8.26	
C	.495	.505	12.57	12.83	
D	.182	.192	4.62	4.88	
E	.990	1.010	25.12	26.65	
F	1.490	1.510	37.85	38.35	
G	1.500	1.525	38.10	38.70	
H	.120	.130	3.05	3.30	
J	-----	.400	-----	10.16	
K	.240	.260	6.10	6.60	
L	.490	.510	12.45	12.95	
M	.330	.350	8.38	6.90	
N	.175	.195	4.45	4.95	∅
P	.035	.045	0.89	1.14	
Q	.445	.455	11.30	11.56	
R	.890	.910	22.61	23.11	

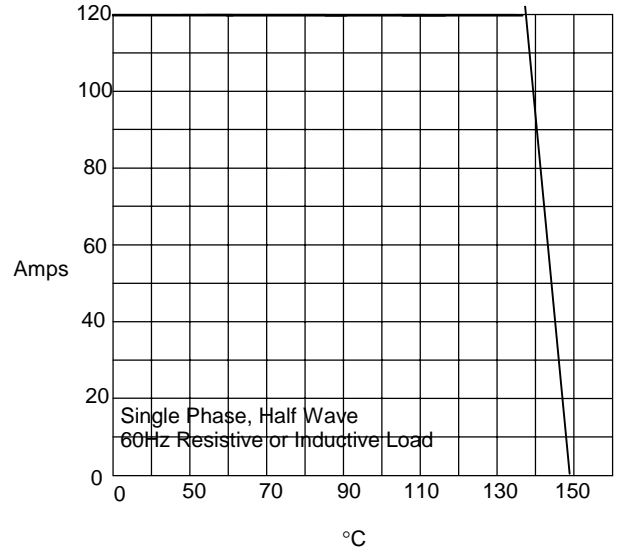
\*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

Figure 1  
Typical Forward Characteristics



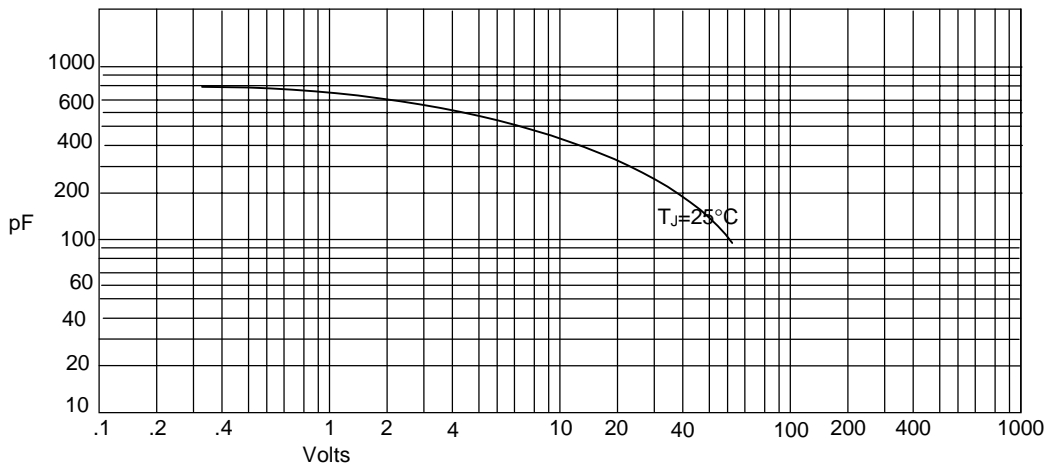
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

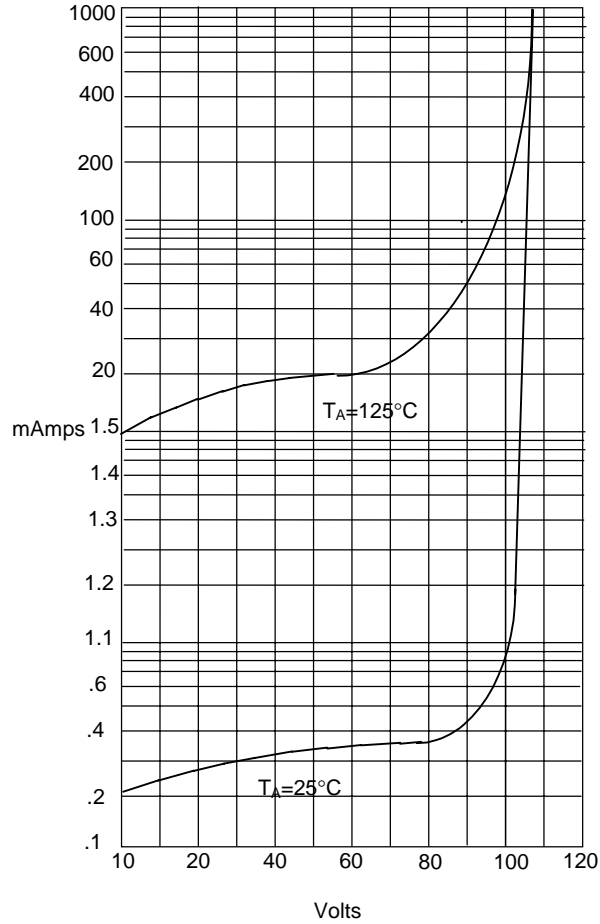
Figure 3  
Junction Capacitance



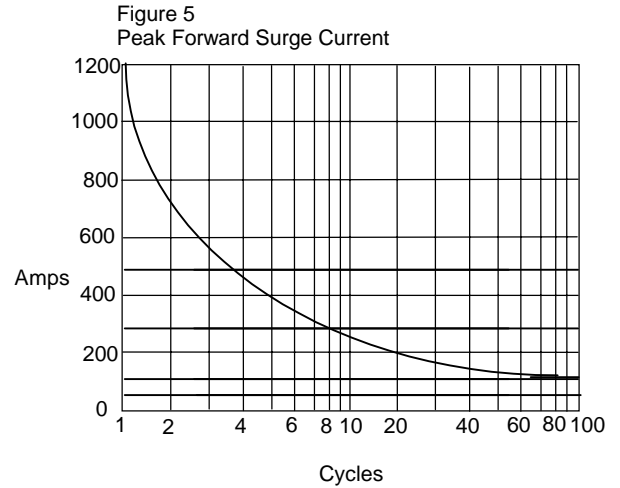
Junction Capacitance - pF versus  
Reverse Voltage - Volts



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