

MCC

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

FST10020 THRU FST100100

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

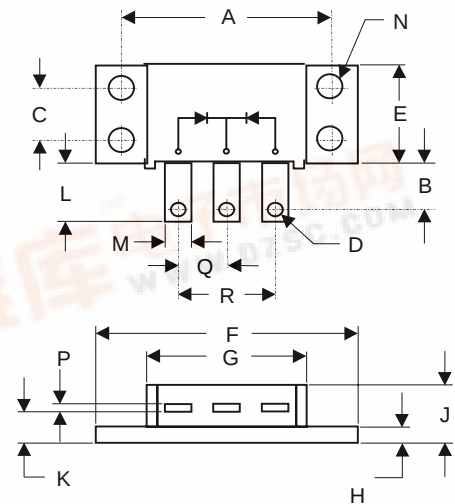
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FST10020	20V	14V	20V
FST10030	30V	21V	30V
FST10035	35V	24.5V	35V
FST10040	40V	28V	40V
FST10045	45V	31.5V	45V
FST10060	60V	42V	60V
FST10080	80V	56V	80V
FST110100	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	100 A	$T_A = 85^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	1000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F		$I_{FM} = 50.0A$; $T_A = 25^\circ\text{C}$
FST10020-10045		.63 V	
FST10060		.75 V	
FST10080-100100		.84 V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	2 mA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance	C_J	300pF	Measured at 1.0MHz, $V_R=4.0V$

100 Amp Schottky Barrier Rectifier 20 to 100 Volts

POWERMOD

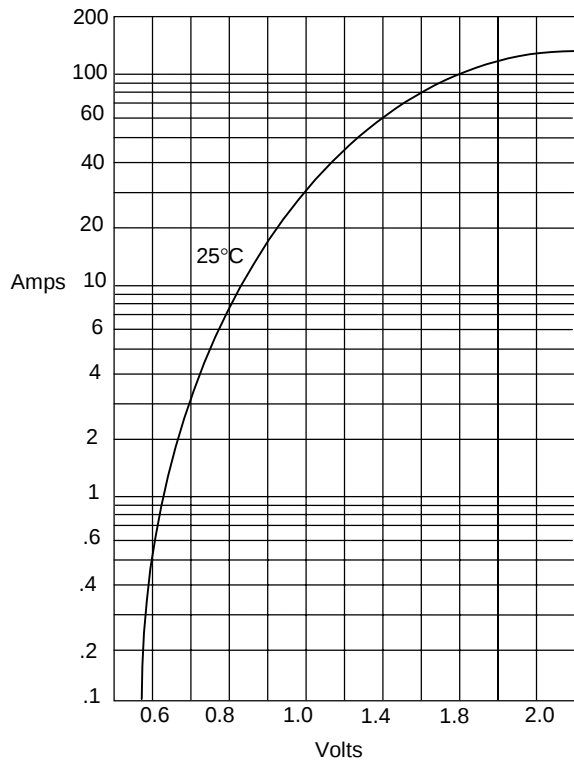


DIM	INCH		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.995	2.005	50.67	50.93	
B	.330	.325	7.62	8.26	
C	.495	.505	12.57	12.83	
D	.182	.192	4.62	4.88	
E	.990	1.010	25.12	26.65	
F	1.490	1.510	37.85	38.35	
G	1.500	1.525	38.10	38.70	
H	.120	.130	3.05	3.30	
J	-----	.400	-----	10.16	
K	.240	.260	6.10	6.60	
L	.490	.510	12.45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

FST10020 thru FST100100

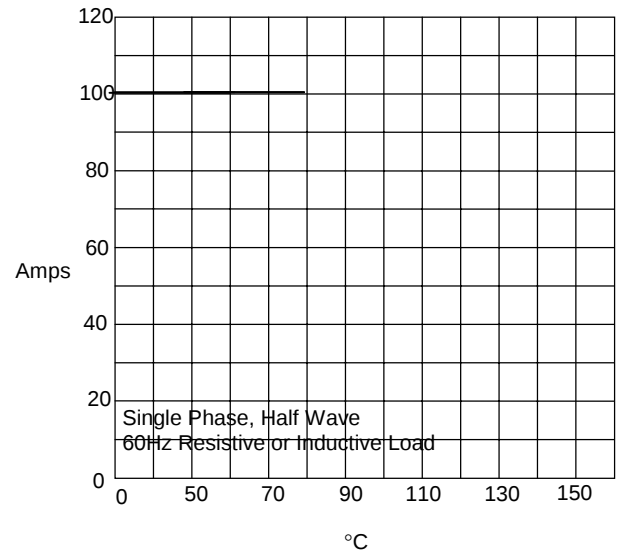


Figure 1
Typical Forward Characteristics



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

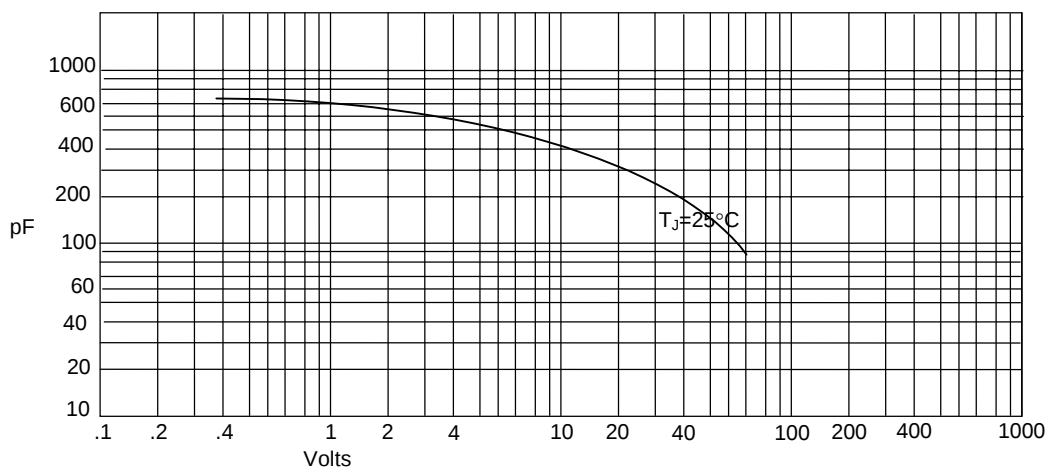
Figure 2
Forward Derating Curve



Single Phase, Half Wave
60Hz Resistive or Inductive Load

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

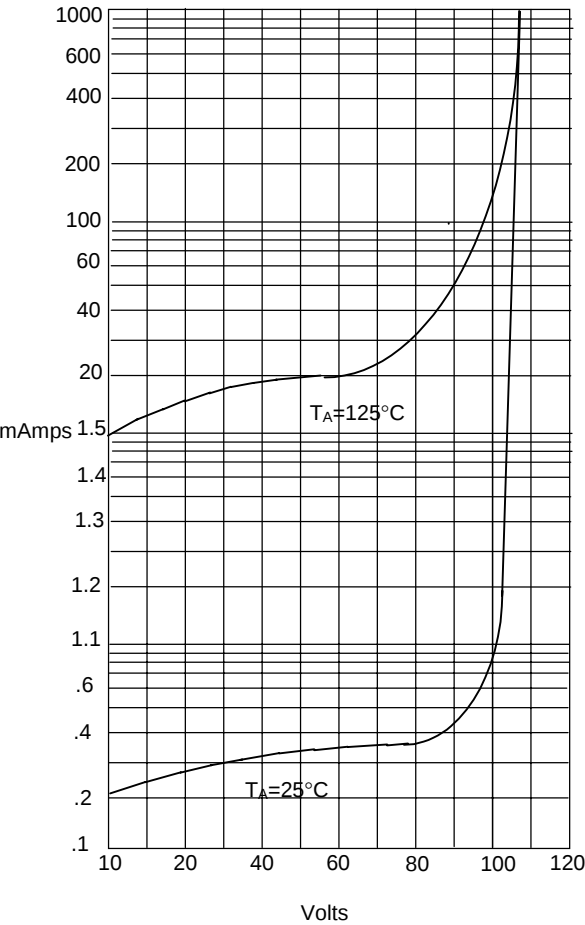
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

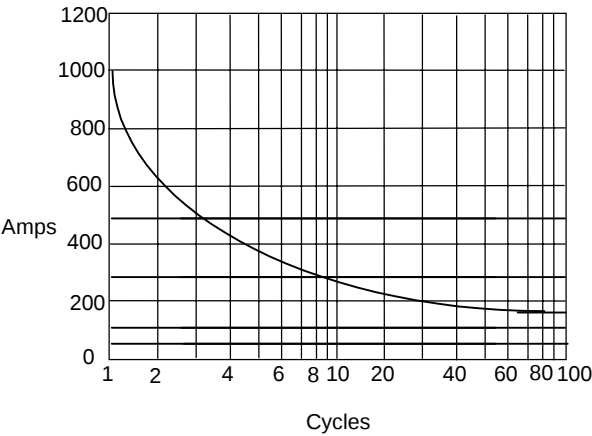


Figure 4
Typical Reverse Characteristics



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

Figure 5
Peak Forward Surge Current



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