

SS12 THRU SS110

Features

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- Reverse Energy Tested
- High Current Capability
- Extremely Low Thermal Resistance

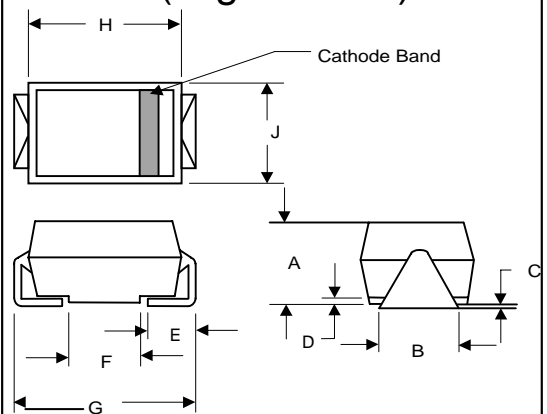
**1 Amp Schottky
Rectifier
20 to 100 Volts**

Maximum Ratings

Operating Temperature: -55 C to +125 C
Storage Temperature: -55 C to +150 C
Maximum Thermal Resistance; 35 C/W Junction To Lead

GM Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SS12	SS12	20V	14V	20V
SS13	SS13	30V	21V	30V
SS14	SS14	40V	28V	40V
SS15	SS15	50V	35V	50V
SS16	SS16	60V	42V	60V
SS18	SS18	80V	56V	80V
SS110	SS110	100V	70V	100V

DO-214AC (SMAJ) (High Profile)



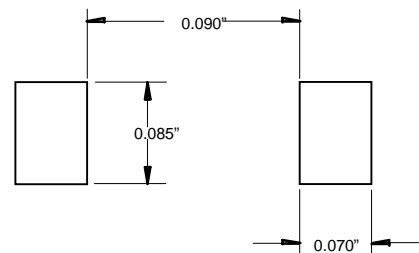
Electrical Characteristics @ 25 C Unless Otherwise Specified

Parameter	Symbol	Value	Conditions
Average Forward Current	$I_{F(AV)}$	1.0A	$T_J = 100\text{ C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	SS12: .45V SS13: .55V SS14: .60V SS15-16: .70V SS18-110: .85V	$I_{FM} = 1.0A$; $T_J = 25\text{ C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	$T_A = 25\text{ C}$ $T_A = 100\text{ C}$
Typical Junction Capacitance		20pF	1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 300 sec, Duty cycle 2%

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.078	.116	1.98	2.95	
B	.067	.089	1.70	2.25	
C	.002	.008	.05	.20	
D	---	.02	---	.51	
E	.035	.055	.89	1.40	
F	.065	.096	1.65	2.45	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	

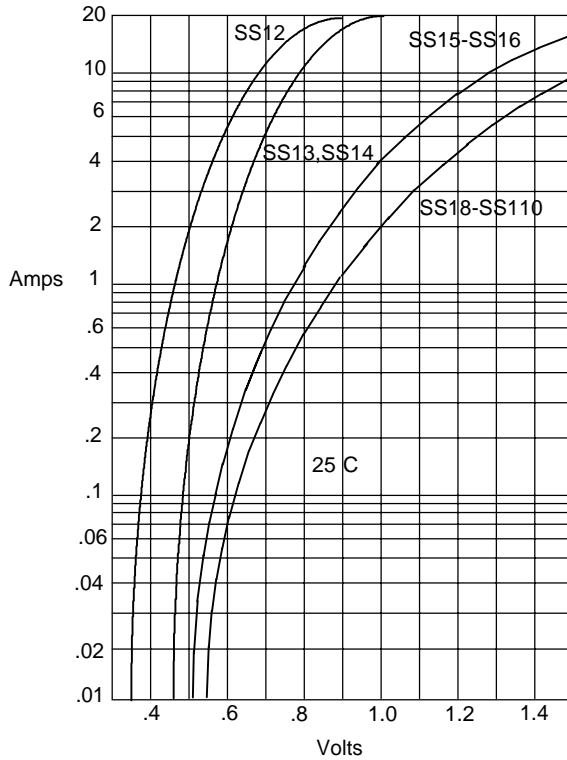
SUGGESTED SOLDER PAD LAYOUT



SS12 thru SS110

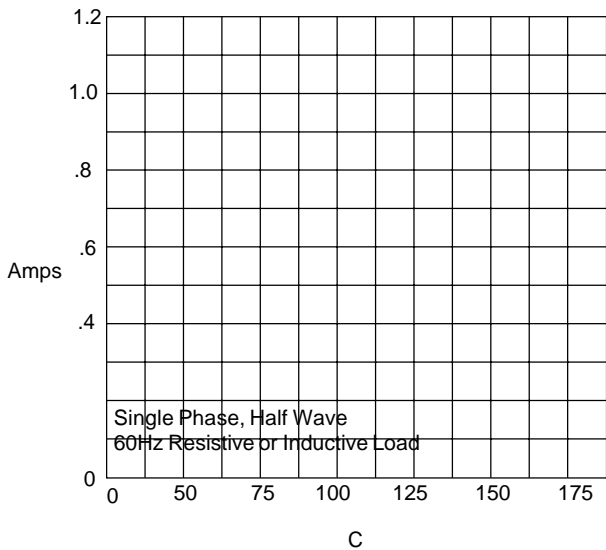


Figure 1
Typical Forward Characteristics



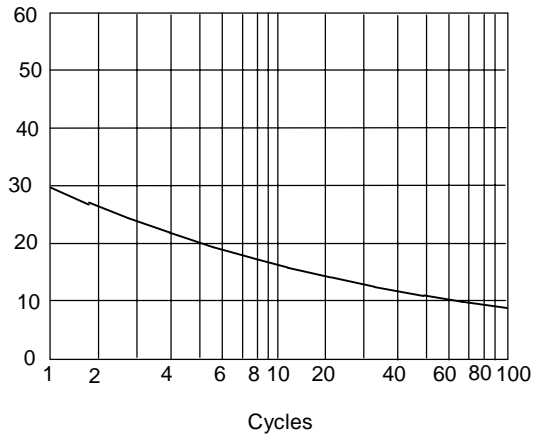
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

Figure 3
Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles