

Features

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

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

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

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_J = 100^\circ\text{C}$
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	$I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	SS12 230pF SS13-SS110 50pF	Measured at 1.0MH, $V_R=4.0V$

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

1 Amp Schottky Rectifier 20 to 100 Volts

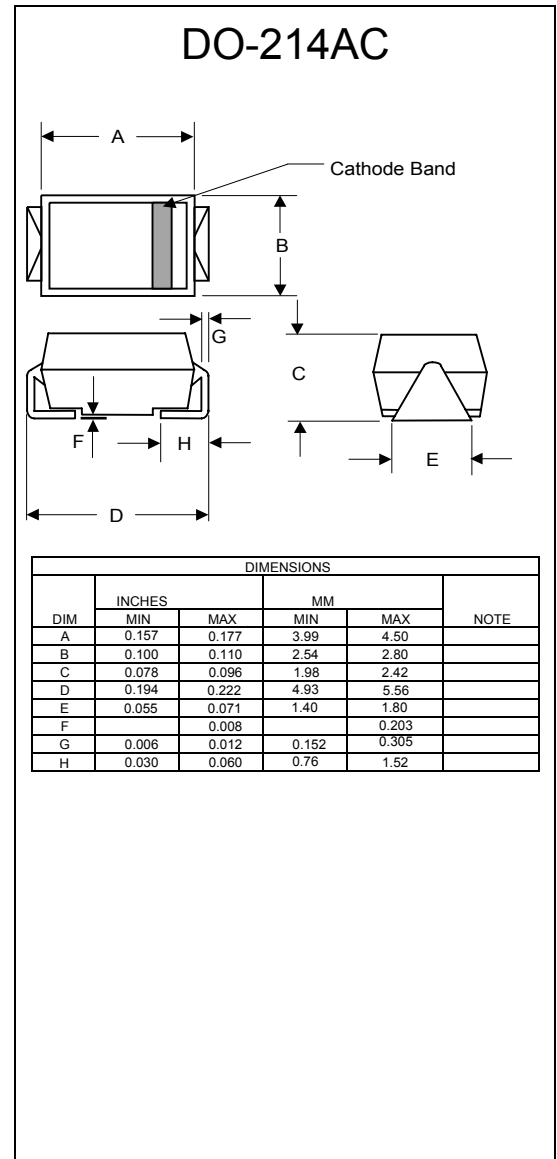


Figure 1
Typical Forward Characteristics

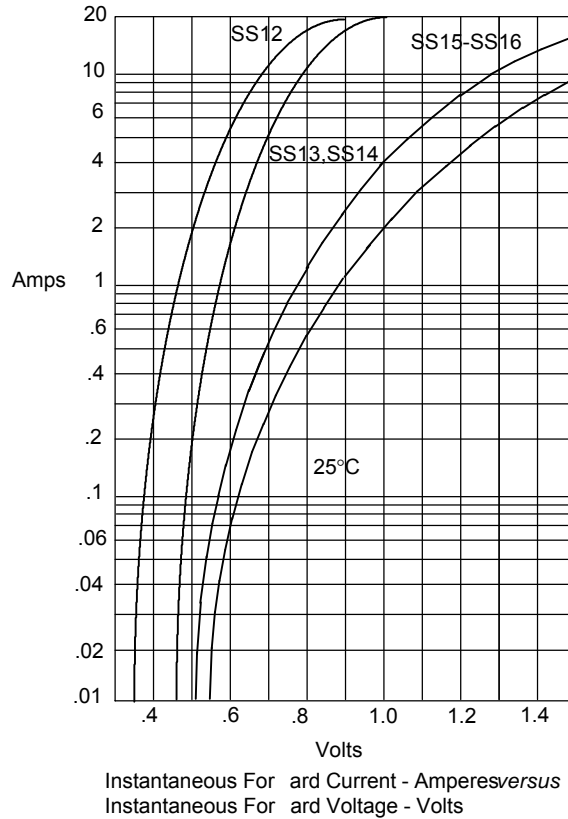
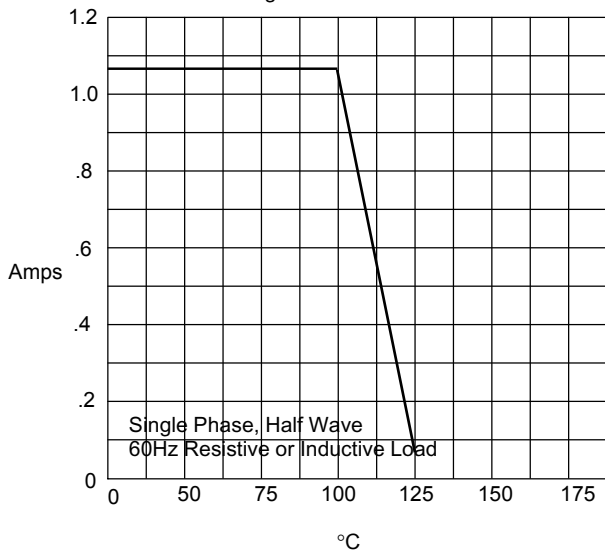
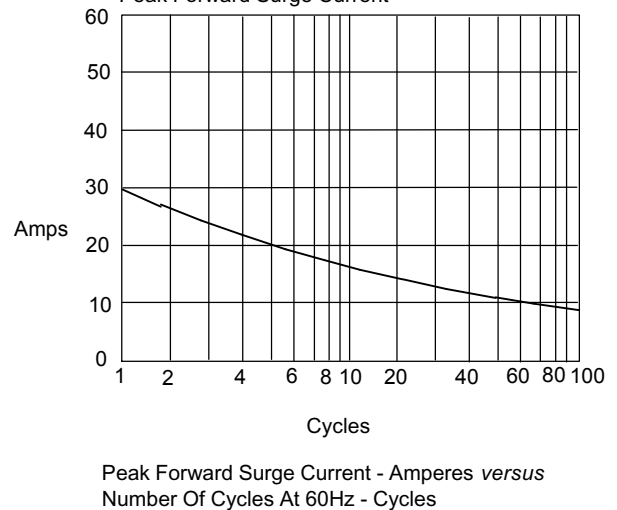


Figure 2
Forward Derating Curve



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

Figure 3
Peak Forward Surge Current



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