



# SS2A - SS2M

PRV : 50 - 1000 Volts  
 Io : 2.0 Amperes

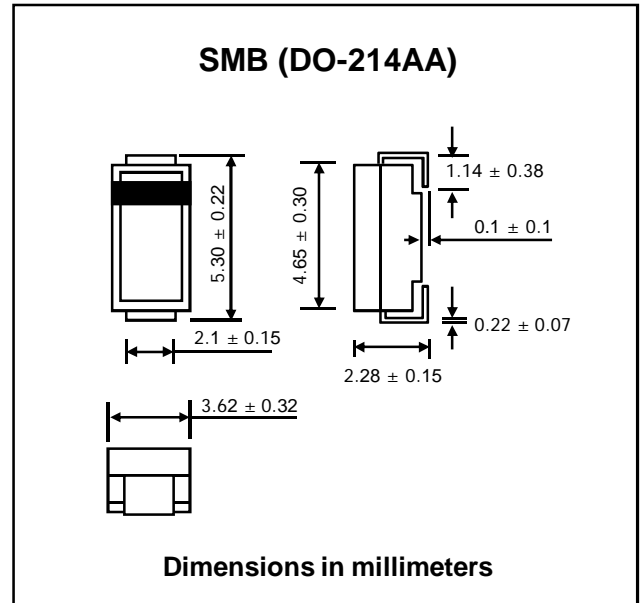
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Super fast recovery time
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : SMB Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.1079 gram

## SURFACE MOUNT SUPER FAST RECTIFIERS



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

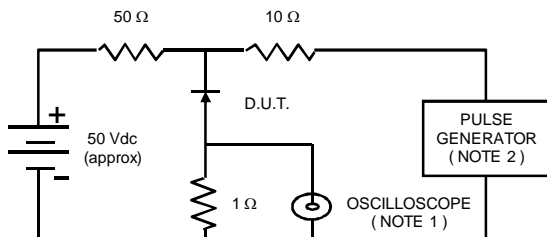
RATING	SYMBOL	SS2A	SS2B	SS2C	SS2D	SS2E	SS2G	SS2J	SS2K	SS2M	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	300	400	600	800	1000	V
Maximum Average Forward Current $T_a = 55\text{ }^\circ\text{C}$	$I_{F(AV)}$	2.0									A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	75									A
Maximum Peak Forward Voltage at $I_F = 2.0\text{ A}$ .	$V_F$	0.95			1.7			4.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0							20		$\mu\text{A}$
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	35									ns
Typical Junction Capacitance ( Note 2 )	$C_J$	50									pf
Junction Temperature Range	$T_J$	- 65 to + 150									$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 150									$^\circ\text{C}$

**Notes :**

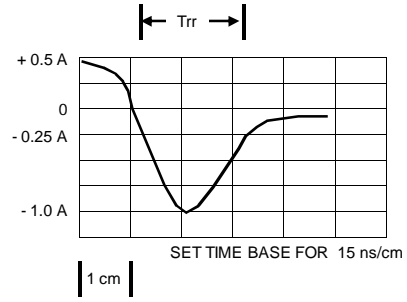
- (1) Reverse Recovery Test Conditions :  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

**RATING AND CHARACTERISTIC CURVES ( SS2A - SS2M )**

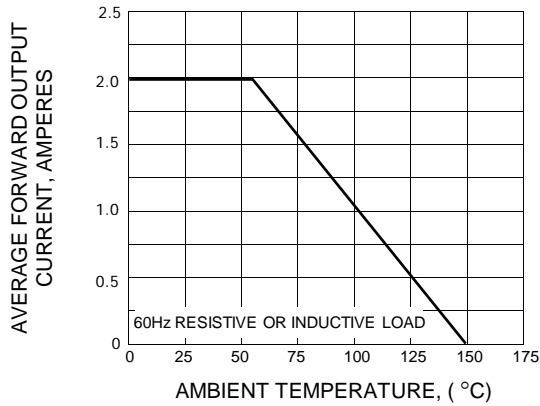
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



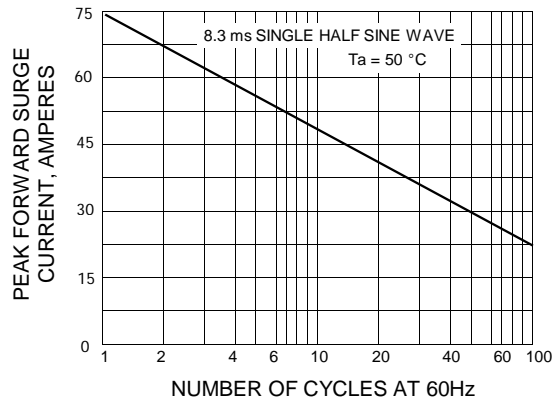
NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.  
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.  
 3. All Resistors = Non-inductive Types.



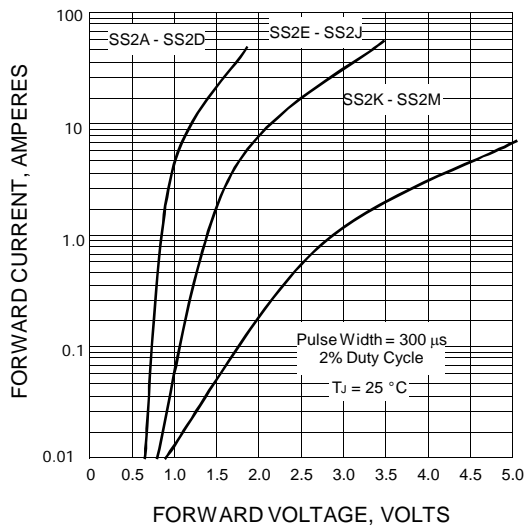
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

