

SS3AS - SS3MS

PRV : 50 - 1000 Volts
Io : 3.0 Amperes

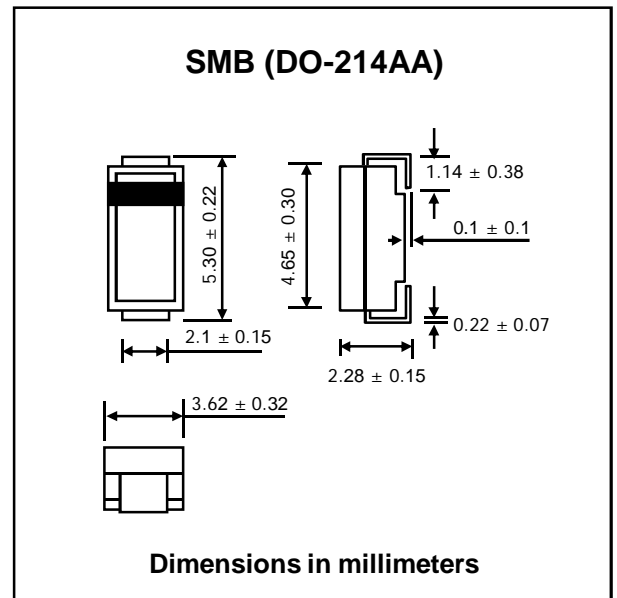
FEATURES :

- * Glass passivated junction chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Super fast recovery time
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMB Molded plastic
- * Epoxy : UL94V-O 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	SS3AS	SS3BS	SS3CS	SS3DS	SS3ES	SS3GS	SS3JS	SS3KS	SS3MS	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 0.375"(9.5mm) Lead Length $T_a = 55\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.0									A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	125									A
Maximum Peak Forward Voltage at $I_F = 3.0\text{ A}$	V_F	0.95			1.7			4.0			V
Maximum DC Reverse Current $T_j = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_j = 100\text{ }^\circ\text{C}$	I_R	10									μA
	$I_{R(H)}$	500									
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 (SS3AS - SS3MS)

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

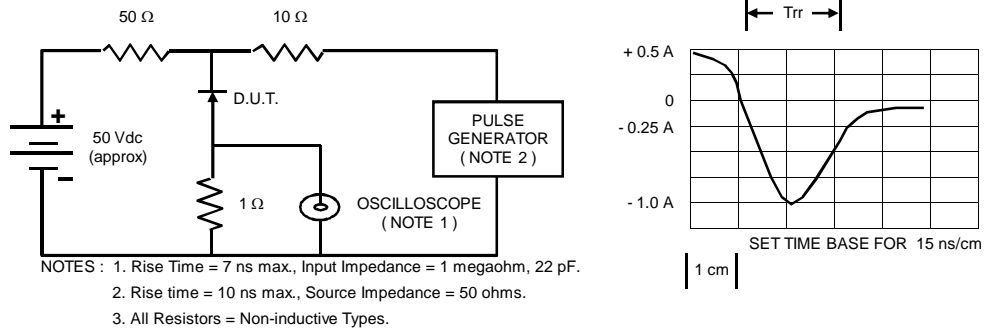


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

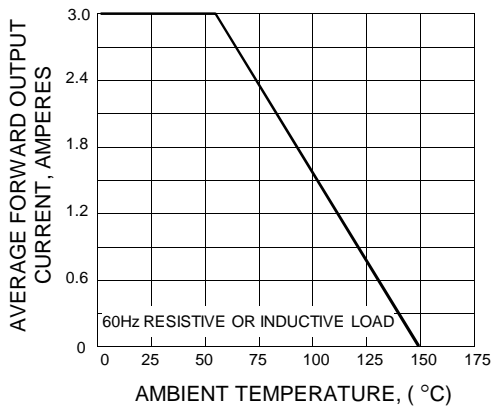


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

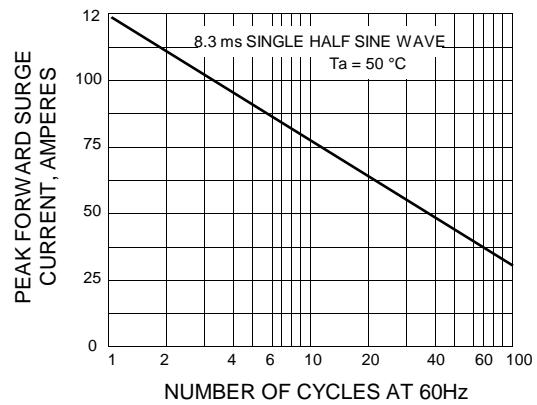


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

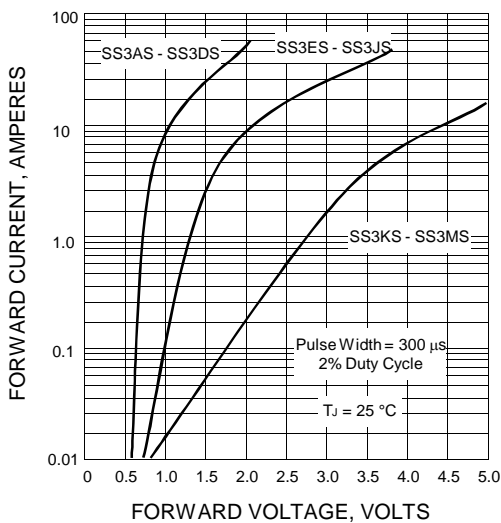


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

