

SS1A - SS1M

PRV : 50 - 1000 Volts

Io : 1.0 Ampere

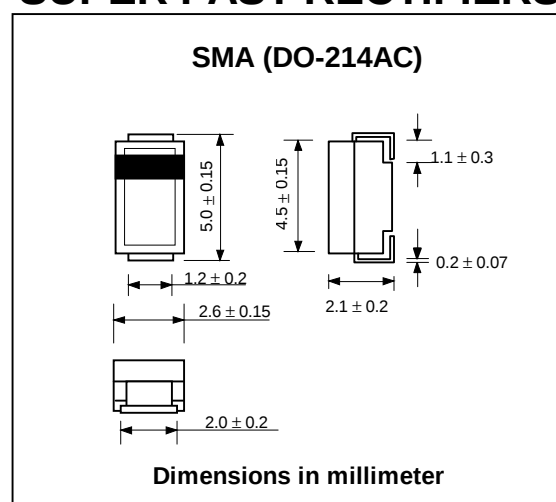
FEATURES :

- * 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 : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.067 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	SS1A	SS1B	SS1C	SS1D	SS1E	SS1G	SS1J	SS1K	SS1M	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	150	200	300	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	105	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	150	200	300	400	600	800	1000	V
Maximum Average Forward Current Ta = 55 °C	IF(AV)	1.0									A
Maximum Peak Forward Surge Current 8.3 ms. Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	30									A
Maximum Peak Forward Voltage at IF = 1.0 A	VF	0.95				1.7			4.0		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0							10		μA
Maximum Reverse Recovery Time (Note 1)	Trr	35									ns
Typical Junction Capacitance (Note 2)	CJ	50									pf
Junction Temperature Range	TJ	- 65 to + 150									°C
Storage Temperature Range	TSTG	- 65 to + 150									°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{dc}

RATING AND CHARACTERISTIC CURVES (SS1A - SS1M)

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

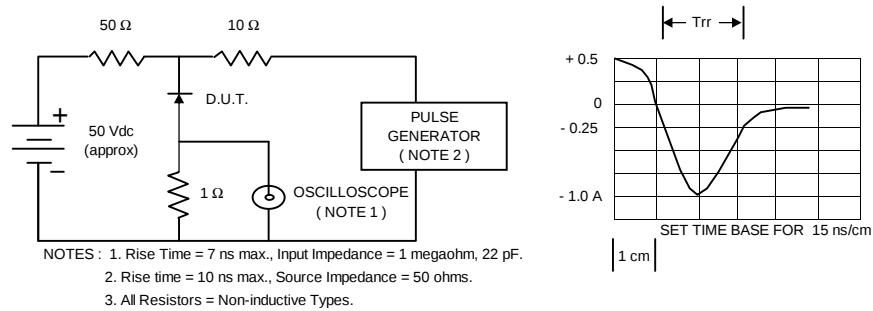


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

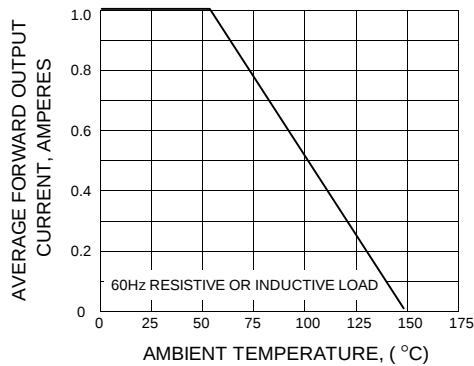


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

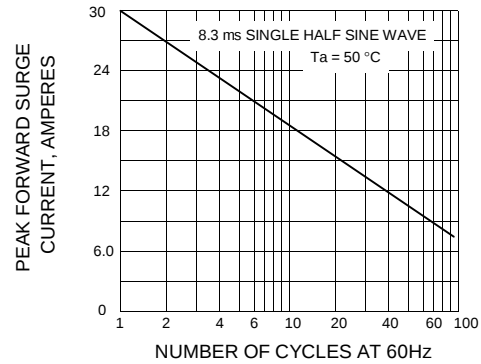


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

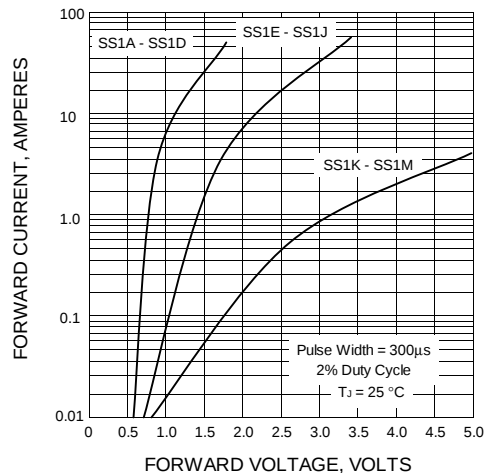


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

