

SS5A - SS5M

PRV : 50 - 1000 Volts

Io : 5.0 Amperes

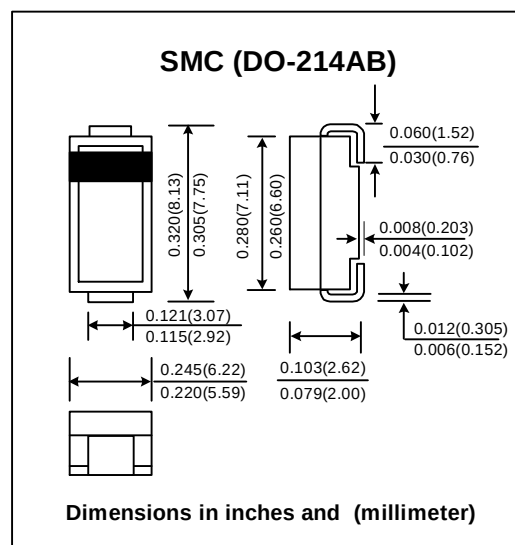
FEATURES :

- * 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 : SMC Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.21 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	SS5A	SS5B	SS5C	SS5D	SS5E	SS5G	SS5J	SS5K	SS5M	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)	5.0									A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	135									A
Maximum Peak Forward Voltage at IF = 5.0 A.	VF	0.95				1.7			4.0		V
Maximum DC Reverse Current Tj = 25 °C at Rated DC Blocking Voltage Tj = 100 °C	IR	10									μA
	IR(H)	500									
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 : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

RATING AND CHARACTERISTIC CURVES (SS5A - SS5M)

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

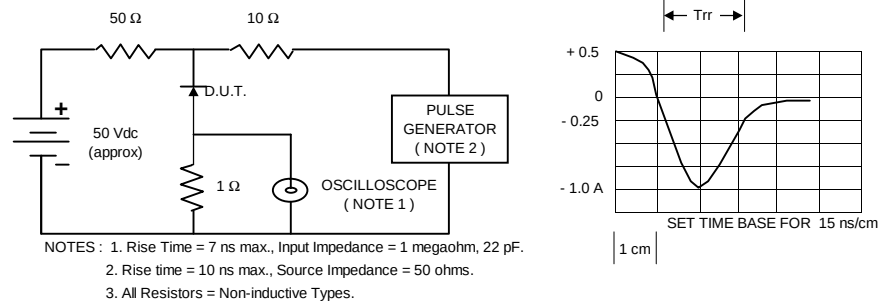


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

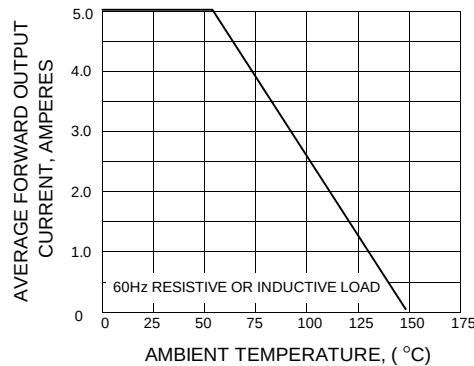


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

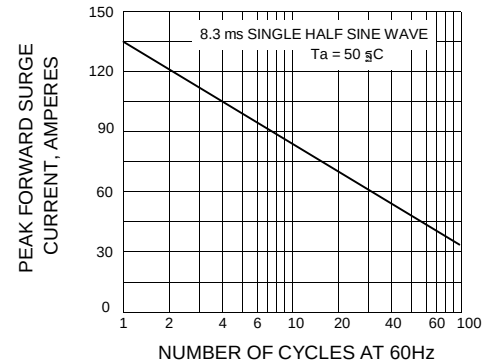


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

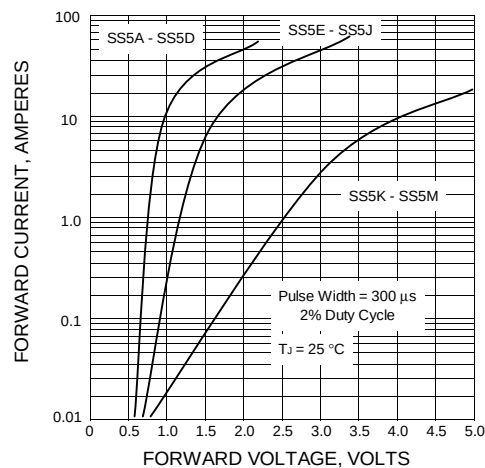


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

