

# SRA7 - SRA9

**PRV : 400 - 1000 Volts**  
**Io : 1.0 Ampere**

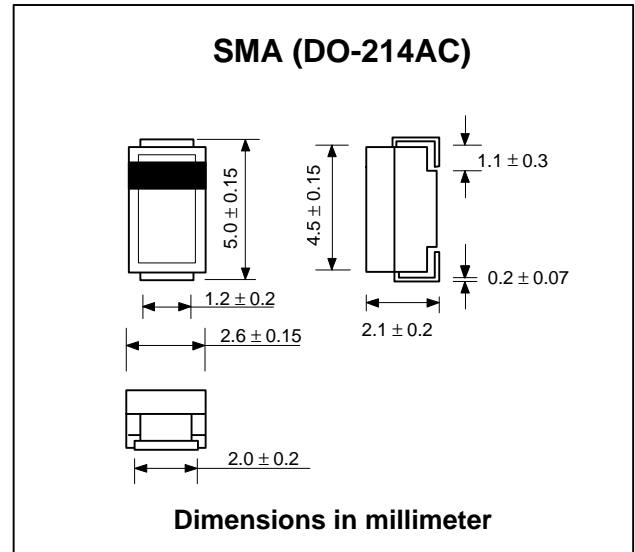
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency

### 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 FAST RECOVERY RECTIFIER



### 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%.

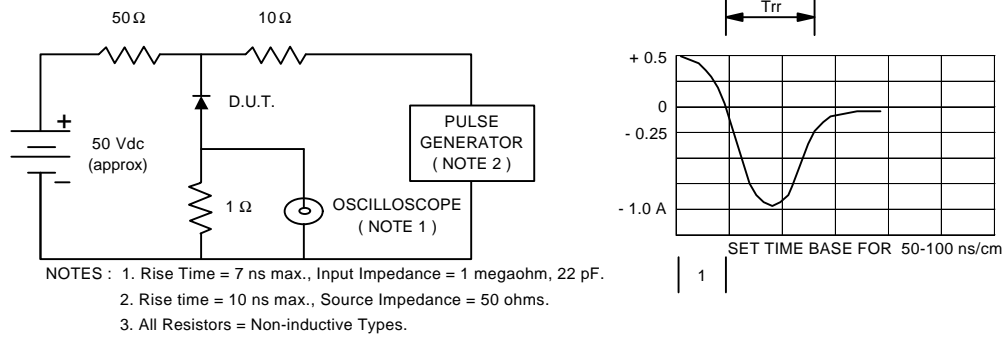
RATING	SYMBOL	SRA7	SRA8	SRA9	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	400	600	1000	V
Maximum RMS Voltage	VRMS	280	420	700	V
Maximum DC Blocking Voltage	VDC	400	600	1000	V
Maximum Average Forward Current Ta = 45 °C	IF(AV)	1.0			A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	35			A
Maximum Peak Forward Voltage at IF = 1.0 A	VF	1.3			V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	IR	5.0			µA
	IR(H)	100			µA
Maximum Reverse Recovery Time (Note 1)	Trr	150	250		ns
Typical Junction Capacitance (Note 2)	CJ	20			pf
Junction Temperature Range	TJ	- 65 to + 150			°C
Storage Temperature Range	TSTG	- 65 to + 150			°C

### Notes :

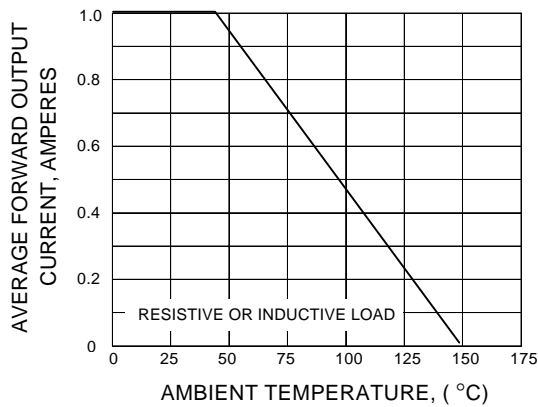
- ( 1 ) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vbc

## RATING AND CHARACTERISTIC CURVES ( SRA7 - SRA9 )

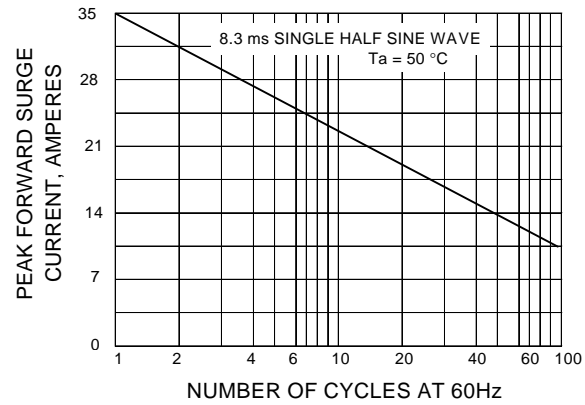
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



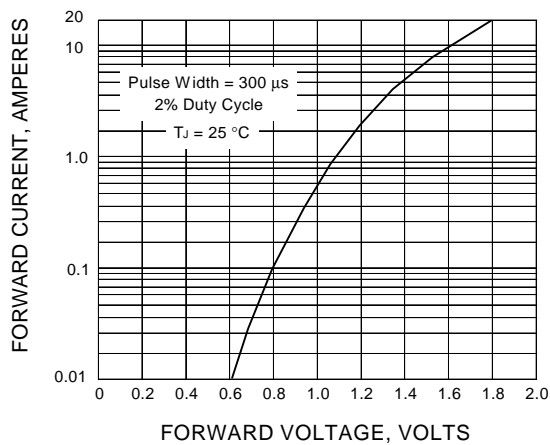
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

