

# SN3N - SN3R

**PRV : 1200 - 2000 Volts**

**Io : 3.0 Amperes**

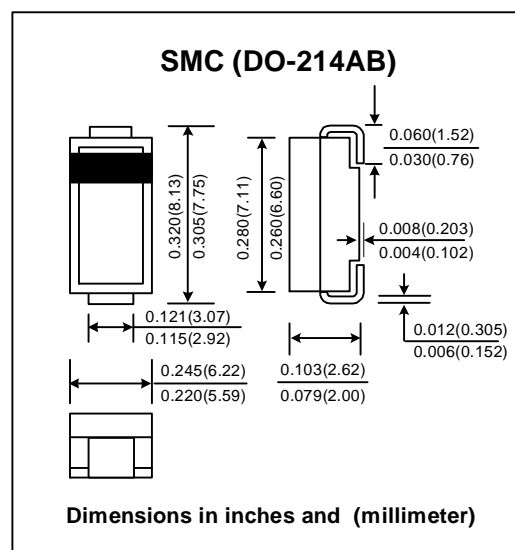
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **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 HIGH VOLTAGE 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%.

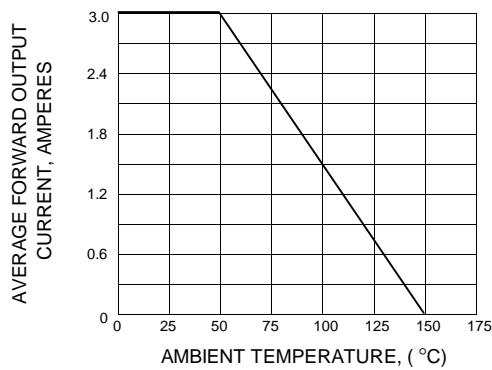
RATING	SYMBOL	SN3N	SN3O	SN3P	SN3Q	SN3R	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1200	1400	1600	1800	2000	V
Maximum RMS Voltage	V <sub>RMS</sub>	840	980	1120	1260	1400	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	1400	1600	1800	2000	V
Maximum Average Forward Current T <sub>a</sub> = 50°C	I <sub>F(AV)</sub>	3.0					A
Maximum Peak One - cycle Surge Forward Current	I <sub>FSM</sub>	100					A
Maximum Peak Forward Voltage at I <sub>F</sub> = 3.0 A	V <sub>F</sub>	2.2					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10					μA
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150					°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150					°C

### Note :

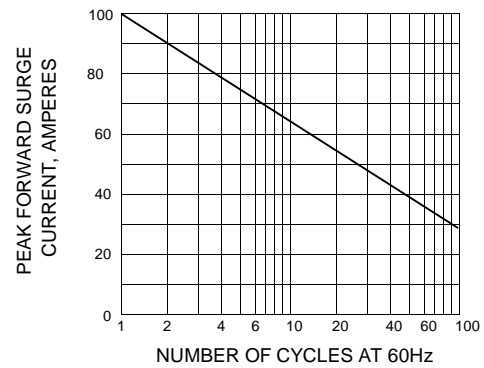
( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>rr</sub> = 0.25 A.

### RATING AND CHARACTERISTIC CURVES ( SN3N - SN3R )

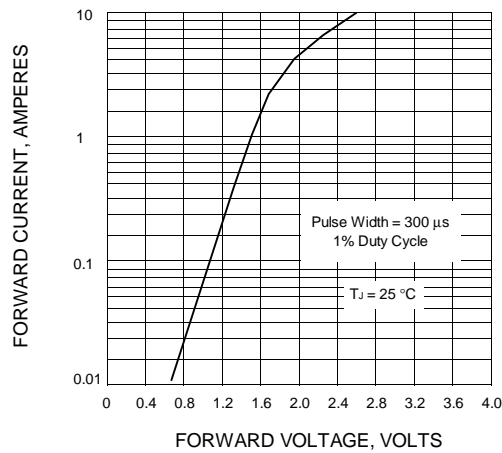
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

