

# SN5N - SN5R

**PRV : 1200 - 2000 Volts**  
**Io : 5.0 Amperes**

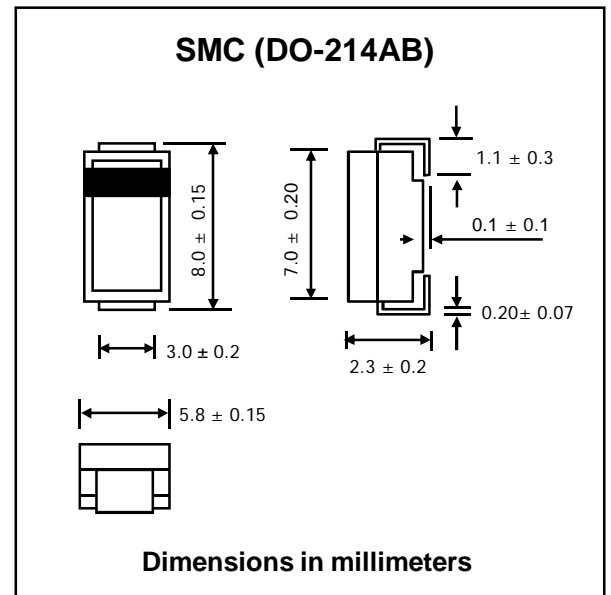
## FEATURES :

- \* 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%.

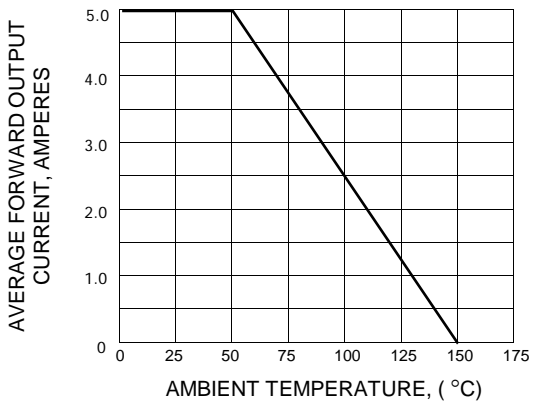
RATING	SYMBOL	SN5N	SN5O	SN5P	SN5Q	SN5R	UNIT	
Maximum Repetitive Peak Reverse Voltage	VRRM	1200	1400	1600	1800	2000	V	
Maximum RMS Voltage	VRMS	840	980	1120	1260	1400	V	
Maximum DC Blocking Voltage	VDC	1200	1400	1600	1800	2000	V	
Maximum Average Forward Current Ta = 50°C	IF(AV)	5.0						A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	200						A
Maximum Peak Forward Voltage at IF = 5.0 A	VF	2.2						V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	IR	10						µA
	IR(H)	100						µA
Typical Junction Capacitance (Note 1)	Cj	36						pF
Junction Temperature Range	TJ	- 40 to + 150						°C
Storage Temperature Range	TSTG	- 40 to + 150						°C

### Notes :

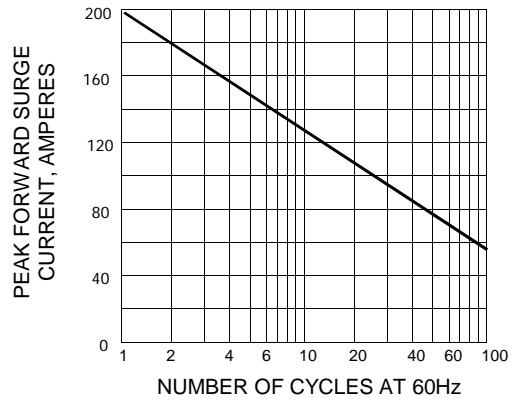
(1) Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

**RATING AND CHARACTERISTIC CURVES ( SN5N - SN5R )**

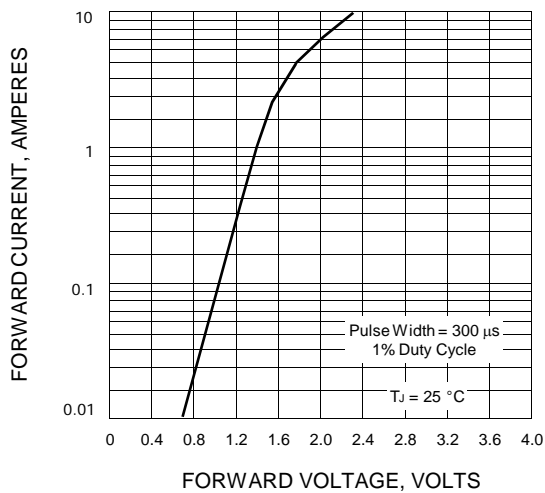
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

