

# SN1N - SN1R

**PRV : 1200 - 2000 Volts**

**Io : 1.0 Ampere**

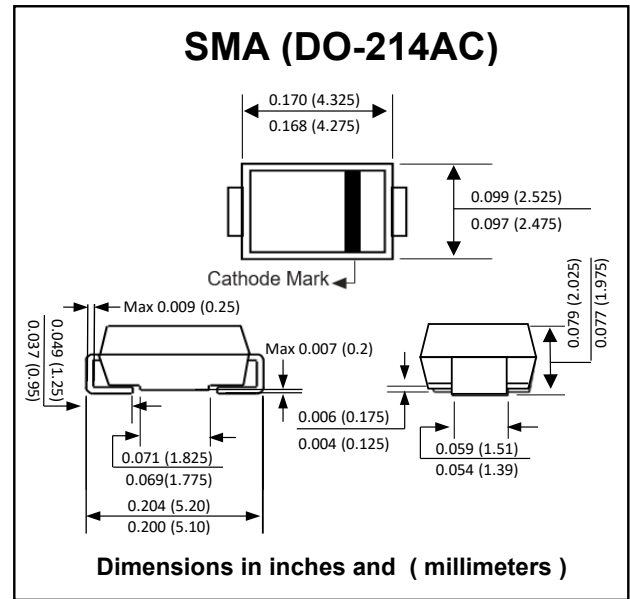
**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **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 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	SN1N	SN1O	SN1P	SN1Q	SN1R	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 = 75°C	IF(AV)	1.0						A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	30						A
Maximum Peak Forward Voltage at IF = 1.0 A	VF	2.2						V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	IR	5.0						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

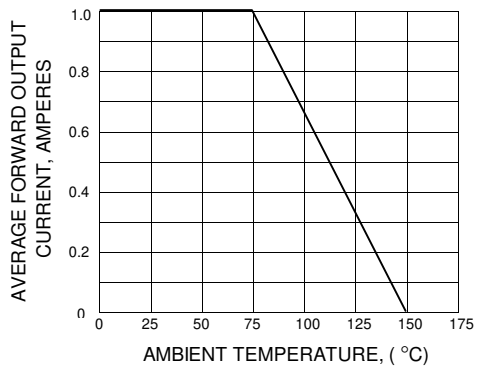
**Notes :**

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

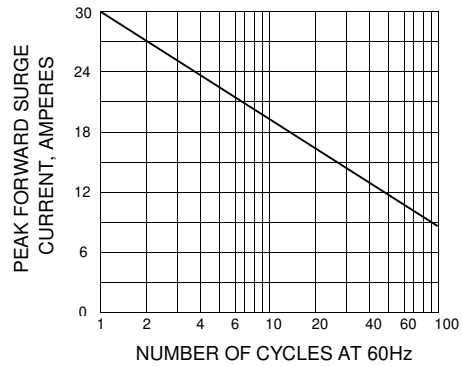


### RATING AND CHARACTERISTIC CURVES ( SN1N - SN1R )

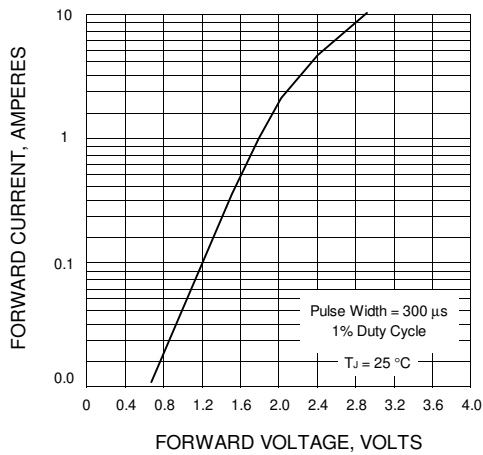
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

