

# SKN7 - SKN9

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

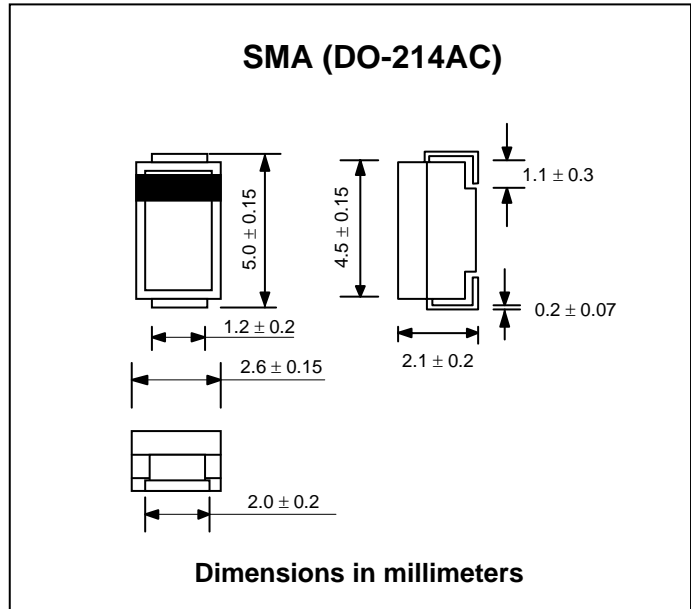
**PRV : 20 - 40 Volts**  
**I<sub>o</sub> : 1.0 Ampere**

**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* High efficiency
- \* Low power loss
- \* Low cost
- \* 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



**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%.

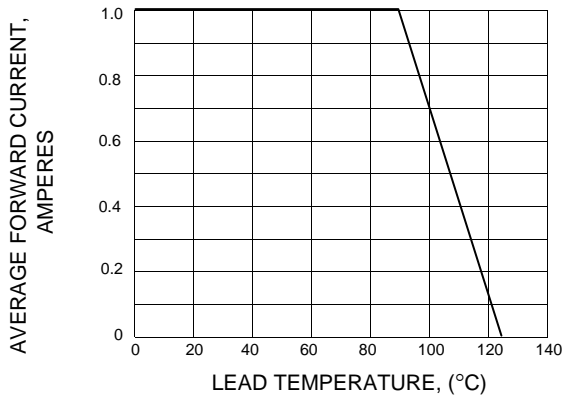
RATING	SYMBOL	SKN7	SKN8	SKN9	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Current T <sub>L</sub> = 90 °C	I <sub>F(AV)</sub>	1.0			A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	25			A
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	0.45	0.55	0.6	Volt.
Maximum Reverse Current Ta = 25 °C at Rated DC Blocking Voltage (Note 1) Ta = 100 °C	I <sub>R</sub>	1.0			mA
	I <sub>R(H)</sub>	10			mA
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	110			pF
Junction Temperature Range	T <sub>J</sub>	- 65 to + 125			°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 125			°C

**Notes :**

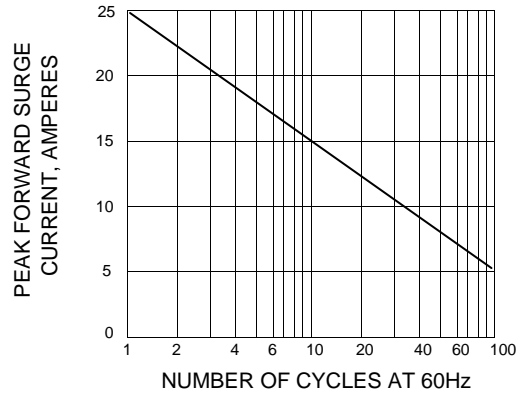
- (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.
- (2) Measured at 1 MHz and applied reverse voltage of 4.0 volts.

**RATING AND CHARACTERISTIC CURVES ( SKN7 - SKN9 )**

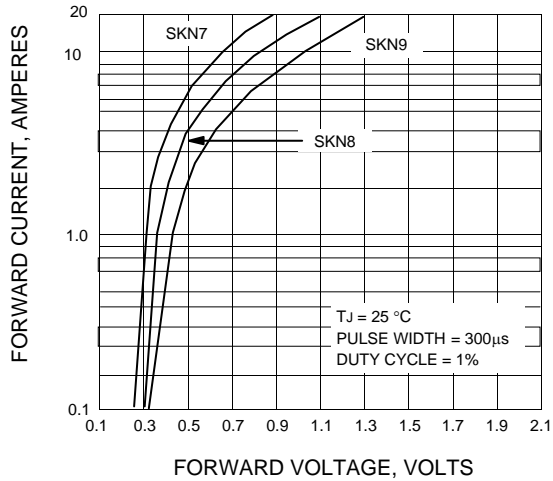
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

