

# SKN7 - SKN9

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

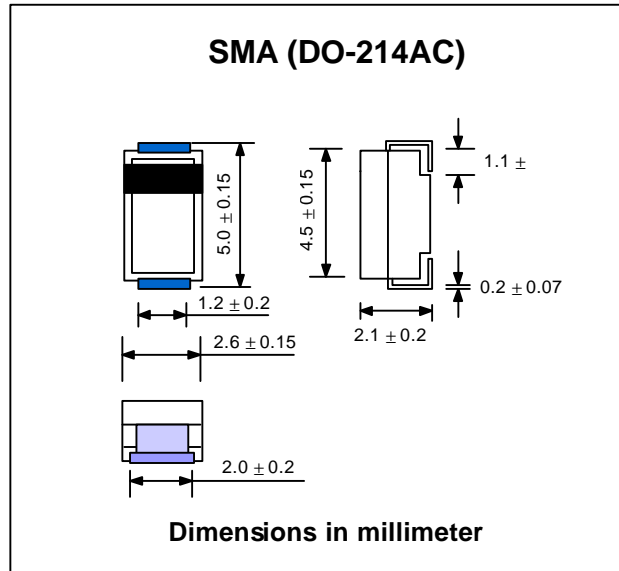
**PRV : 20 - 40 Volts**  
**I<sub>o</sub> : 1.0 Ampere**

### FEATURES :

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

### 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 : 0.064 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	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	Volts
Maximum Average Forward Current T <sub>L</sub> = 90 °C	I <sub>F(AV)</sub>	1.0			Amp.
Peak Forward Surge Current, 8.3ms single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	25			Amps.
Maximum Forward Voltage at I <sub>F</sub> = 1.0 Amp.	V <sub>F</sub>	0.45	0.55	0.6	Volt.
Maximum Reverse Current T <sub>a</sub> = 25 °C	I <sub>R</sub>	1.0			mA
at Rated DC Blocking Voltage (Note 1) T <sub>a</sub> = 100 °C	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

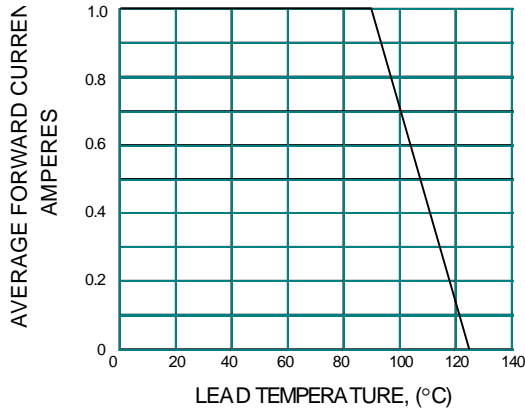


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

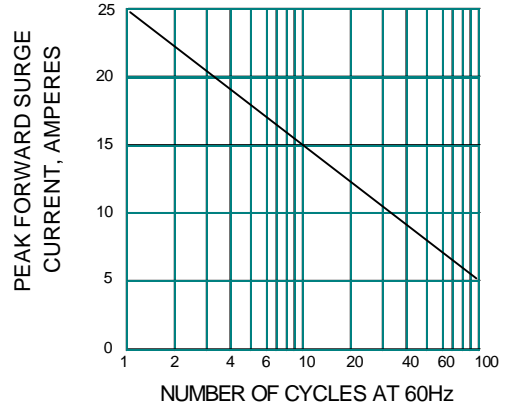


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

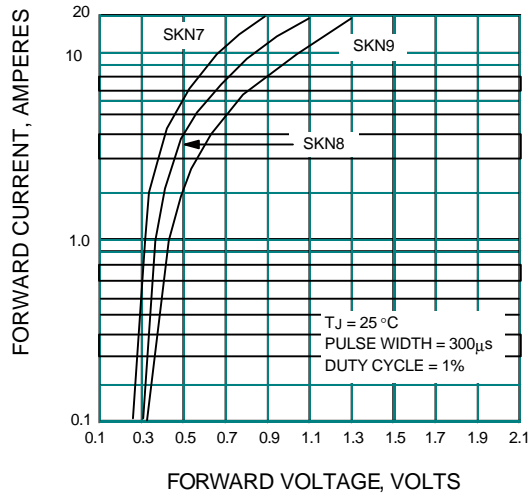


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

