

# SKN0 - SKN2

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

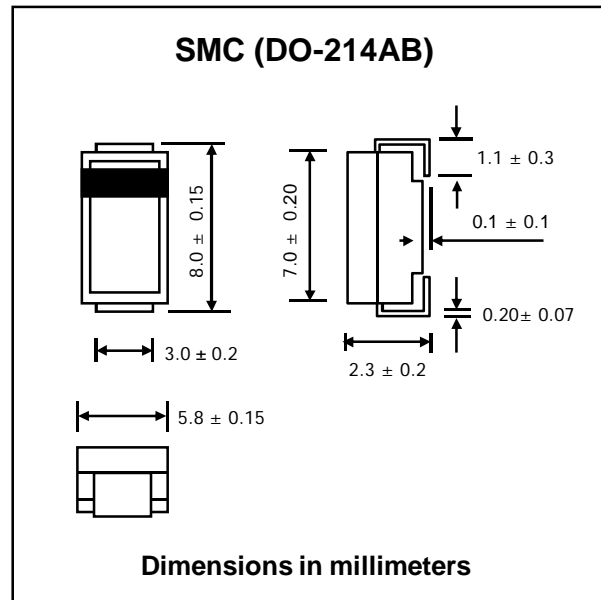
**PRV : 20 - 40 Volts**  
**I<sub>o</sub> : 3.0 Ampere**

### 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 : 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



### 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	SKN0	SKN1	SKN2	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> = 95 °C	I <sub>F(AV)</sub>	3.0			A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) T <sub>L</sub> = 75°C	I <sub>FSM</sub>	80			A
Maximum Forward Voltage at I <sub>F</sub> = 3.0 A (Note 1)	V <sub>F</sub>	0.475	0.500	0.525	V
Maximum Reverse Current at Ta = 25 °C	I <sub>R</sub>	2.0			mA
Rated DC Blocking Voltage (Note 1) Ta = 100 °C	I <sub>R(H)</sub>	20			mA
Typical Thermal Resistance	R <sub>θJL</sub>	20			°C/W
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%.

## RATING AND CHARACTERISTIC CURVES ( SKN0 - SKN2 )

FIG.1 - FORWARD CURRENT DERATING CURVE

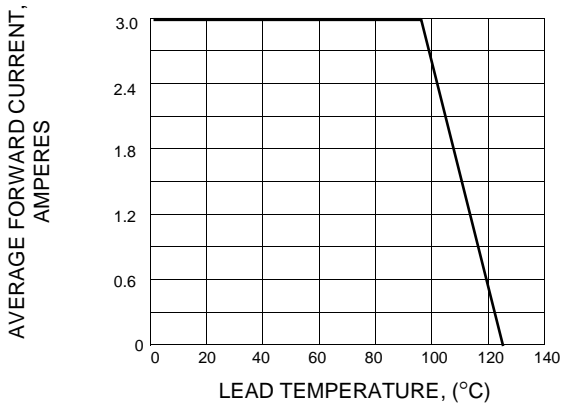


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

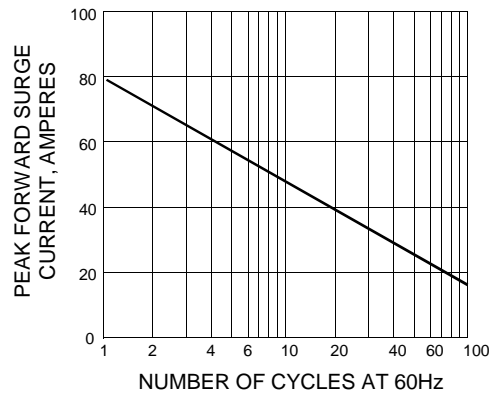


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

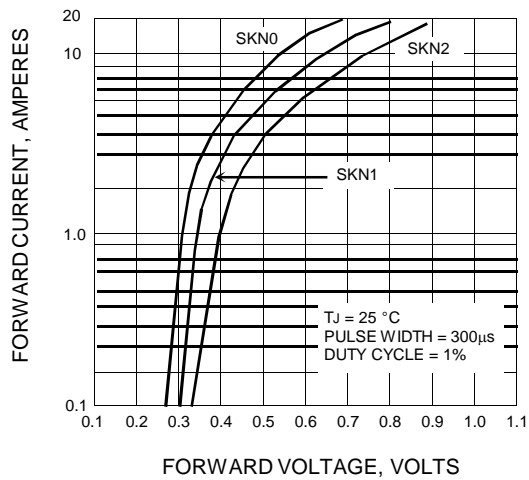


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

