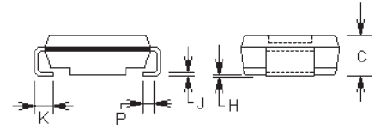
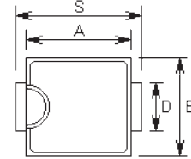


### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guardring for overvoltage protection
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

### SMC



### Mechanical Data

- **Case:** SMC molded plastic body
- **Terminals:** SMC leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any
- **Weight:** 0.007 ounce, 0.25 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.260	0.280	6.60	7.11	
B	0.220	0.240	5.59	6.10	
C	0.075	0.095	1.90	2.41	
D	0.115	0.121	2.92	3.07	
H	0.0020	0.0060	0.051	0.152	
J	0.006	0.012	0.15	0.30	
K	0.030	0.050	0.76	1.27	
P	0.020 REF		0.51 REF		
S	0.305	0.320	7.75	8.13	

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	Symbols	SKN0	SKN1	SKN2	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	Volts
Non-repetitive peak reverse voltage	$V_{RSM}$	24	36	48	Volts
Maximum average forward rectified current at $T_L=75^\circ\text{C}$	$I_{(AV)}$	3.0			Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method) at $T_L=75^\circ\text{C}$	$I_{FSM}$	80.0			Amps
Maximum instantaneous forward voltage at 3.0A (Note 1)	$V_F$	0.475	0.500	0.525	Volts
Maximum instantaneous forward voltage at 9.4A (Note 1)	$V_F$	0.850	0.900	0.950	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note1) $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	2.0 20.0			mA
Typical thermal resistance (Note 2)	$R_{JA}$ $R_{JL}$	40.0 10.0			$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +125			$^\circ\text{C}$

#### Notes:

- (1) Pulse test: 300uS pulse width, 1% duty cycle
- (2) Mounted on P.C. Board with 14mm<sup>2</sup> (0.013mm thick) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES

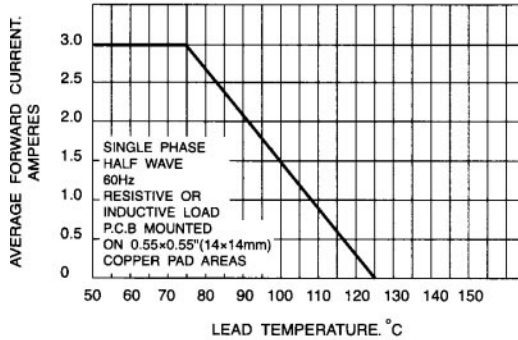


FIG. 1 - FORWARD CURRENT DERATING CURVE

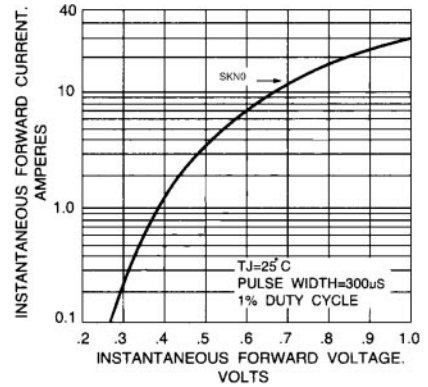


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

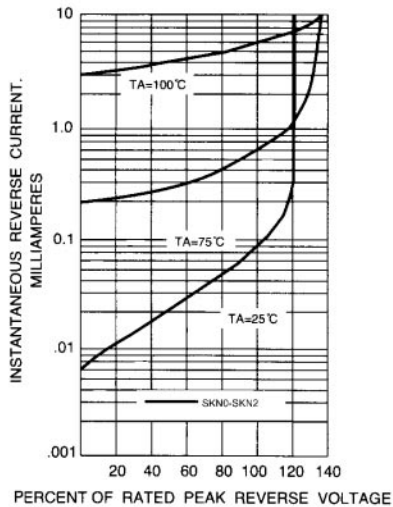


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

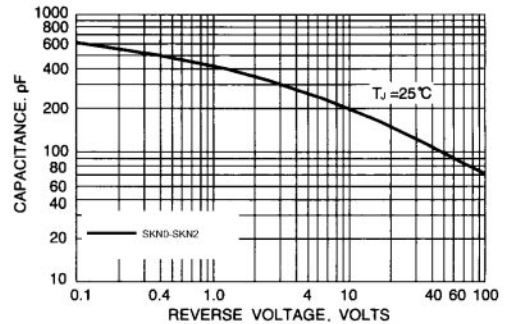


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

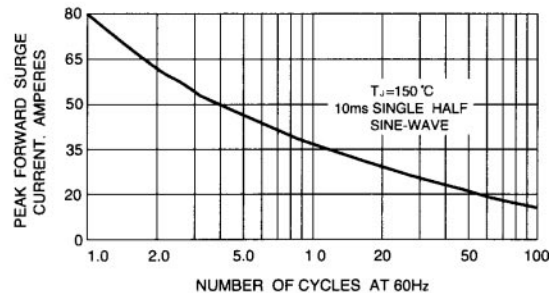


FIG. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT