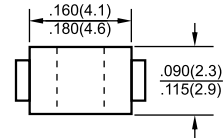
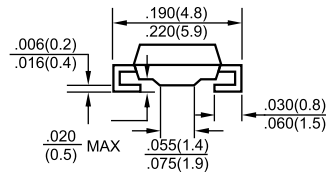
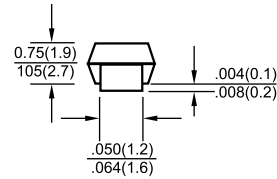


### SMA/DO-214AC



Dimensions in inches and (millimeters)

## Features

- ◇ For surface mounted application
- ◇ Metal to silicon rectifier, majority carrier conduction
- ◇ Low forward voltage drop
- ◇ Easy pick and place
- ◇ High surge current capability
- ◇ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ◇ Epitaxial construction
- ◇ High temperature soldering: 260°C / 10 seconds at terminals

## Mechanical Data

- ◇ Case: Molded plastic
- ◇ Terminals: Pure tin plated, lead free.
- ◇ Polarity: Indicated by cathode band
- ◇ Packaging: 16mm tape
- ◇ 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%

Type Number	Symbol	SK 32A	SK 33A	SK 34A	SK 35A	SK 36A	SK 39A	SK 310A	SK 315A	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current at $T_L$ (See Fig. 1)	$I_{(AV)}$	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	70								A
Maximum Instantaneous Forward Voltage (Note 1) @ 3.0A	$V_F$	0.55		0.75		0.85		0.95		V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	$I_R$	0.5				0.1				mA
		10				2.0				mA
Typical Thermal Resistance ( Note 2 )	$R_{\theta JL}$ $R_{\theta JA}$	28								$^\circ C/W$
		88								
Operating Temperature Range	$T_J$	-55 to +125				-55 to +150				$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ C$

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle  
2. Measured on P.C.Board with 0.2 x 0.2" (5 x 5mm) Copper Pad Areas.

### RATINGS AND CHARACTERISTIC CURVES (SK32A THRU SK315A)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

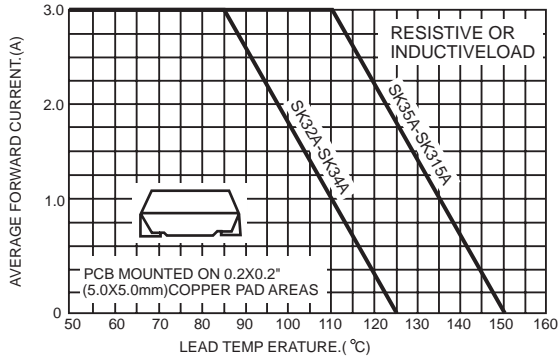


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

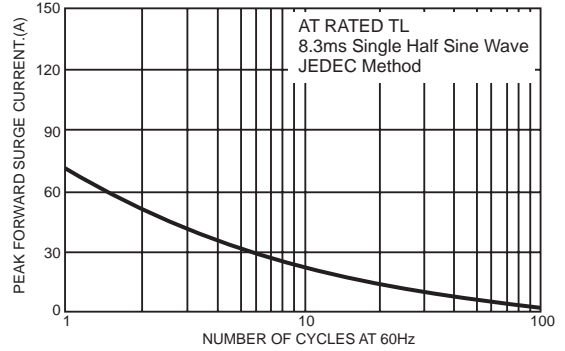


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

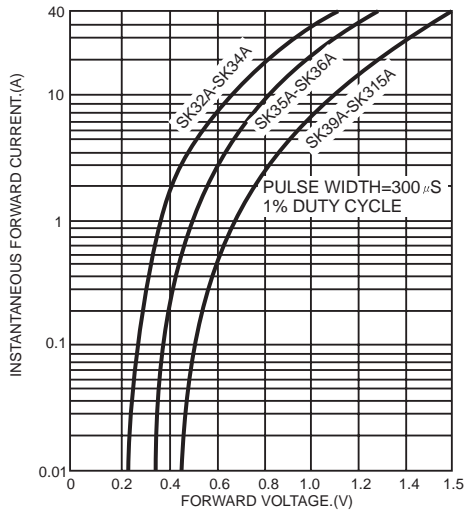


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

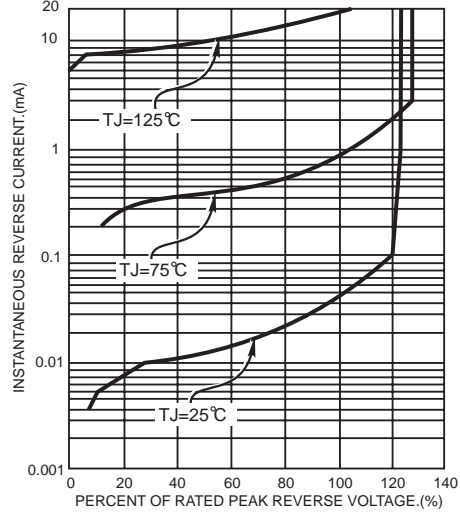


FIG. 5- TYPICAL JUNCTION CAPACITANCE

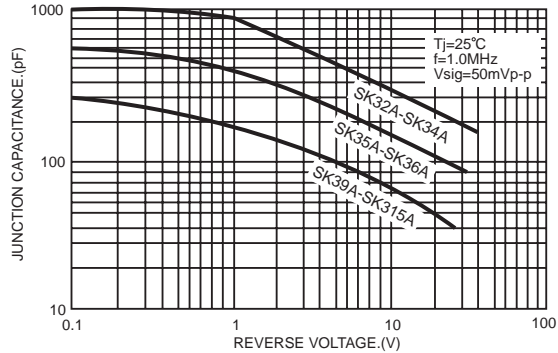


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

