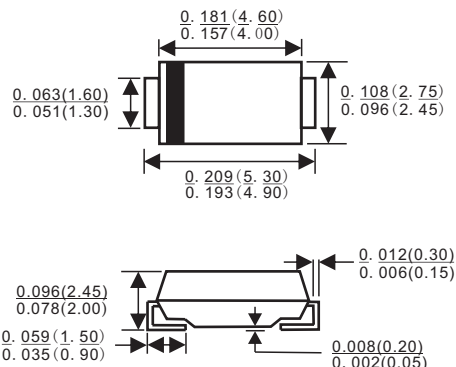


SMA/DO-214AC

Features

- ✧ For surface mounted application
- ✧ Easy pick and place
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low power loss, high efficiency
- ✧ High current capability, low VF
- ✧ 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: JEDEC SMA/DO-214AC Molded plastic
- ✧ Terminals: Pure tin plated, lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Weight: 0.064 gram

Dimensions in inches and(millimeters)

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%

Parameter	SYMBOL	SK 32A	SK 34A	SK 34A	SK 35A	SK 36A	SK 38A	SK 39A	SK 310A	SK 315A	SK 320A	UNITS	
Marking code		SS32	SS34	SS34	SS35	SS36	SS38	SS39	SS310	SS315	SS320		
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	90	100	150	200	V	
Maximum RMS voltage	V _{RWS}	14	21	28	35	42	56	63	70	105	140	V	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	90	100	150	200	V	
Maximum average forward rectified current (see fig1)	I _{F(AV)}	3										A	
Peak forward surge current 8.3ms half-sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	100				80						A	
I ² t Rating for Fusing(t<8.3ms)	I ² t	41.5				20.335						A ² s	
Maximun Forward Voltage @ I _{F(AV)} (Pulse test:300 μ s pulse width,1% duty cycle)	V _F	0.55				0.70		0.85				V	
Maximun DC Reverse current @Rated DC Blocking Voltage (Pulse test:Pulse width 40ms)	T=25℃	I _R	500					100				μ A	
	T=100℃	I _R	5					-				mA	
	T=125℃	I _R	10					5				mA	
Typical Thermal Resistance (Device mounted on PCB with 10mm×20mm×0.1mm copper pad area)	R _{θJA}	75										℃/W	
	R _{θJC}	25											
	R _{θJL}	30											
Junction temperature range	T _J	-55~150					-55~175						℃
Storage temperature range	T _{STG}	-55~150					-55~175						℃



RATINGS AND CHARACTERISTIC CURVES (SS32A THRU SS320A)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

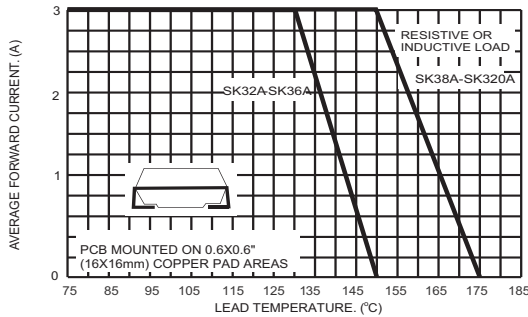


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

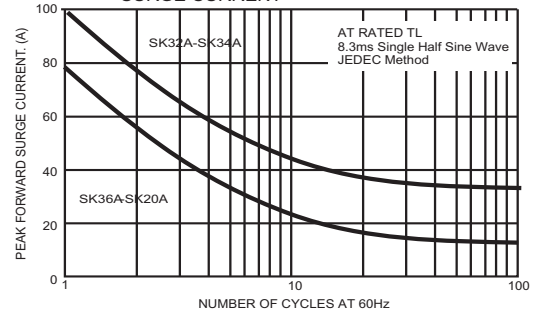


FIG.3- TYPICAL FORWARD CHARACTERISTICS

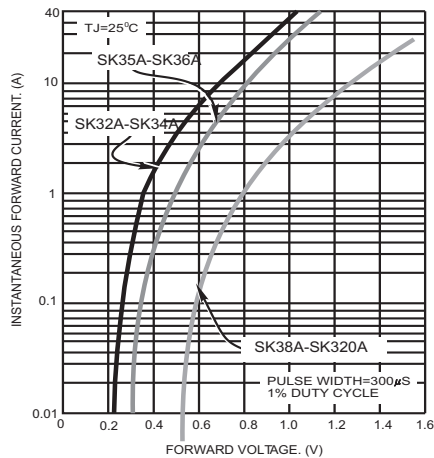


FIG.4- TYPICAL REVERSE CHARACTERISTICS

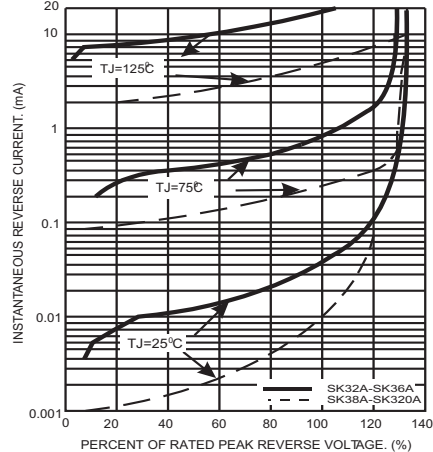


FIG.5- TYPICAL JUNCTION CAPACITANCE

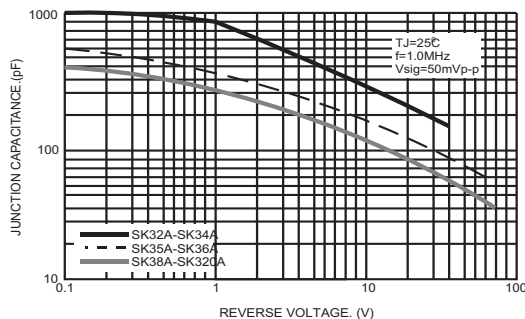
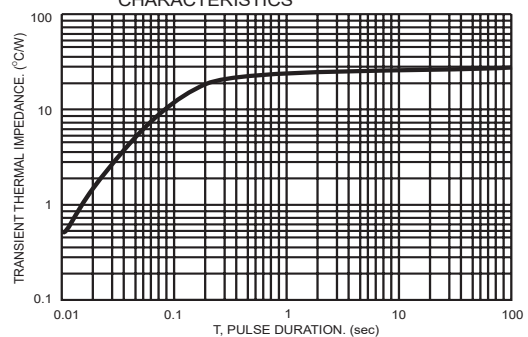


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00