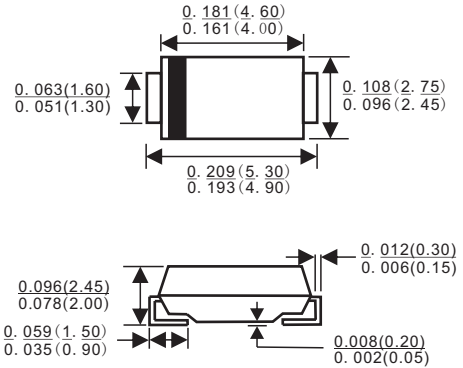




SMA/DO-214AC

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	B320A	B330A	B340A	B350A	B360A	B380A	B390A	B3100A	B3150A	B3200A	UNITS
Marking code			B320	B330	B340	B350	B30	B380	B390	B3100	B3150	B3200	
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 (B320A THRU B3200A)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

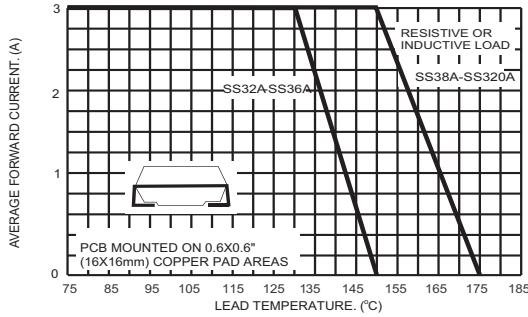


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

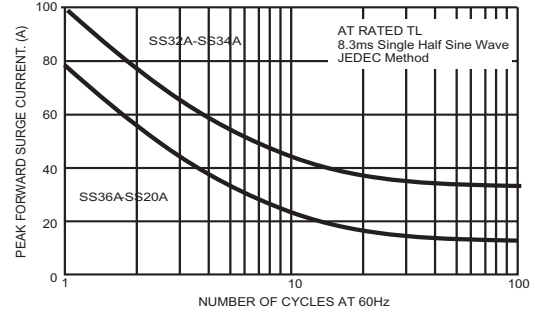


FIG.3- TYPICAL FORWARD CHARACTERISTICS

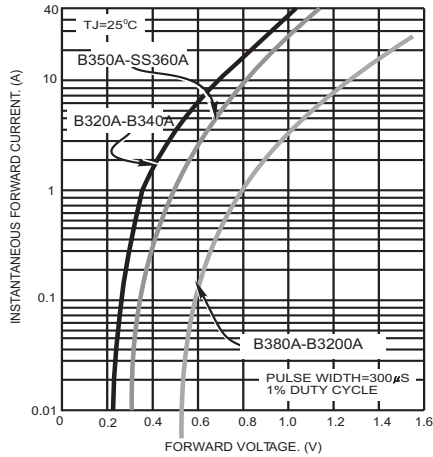


FIG.4- TYPICAL REVERSE CHARACTERISTICS

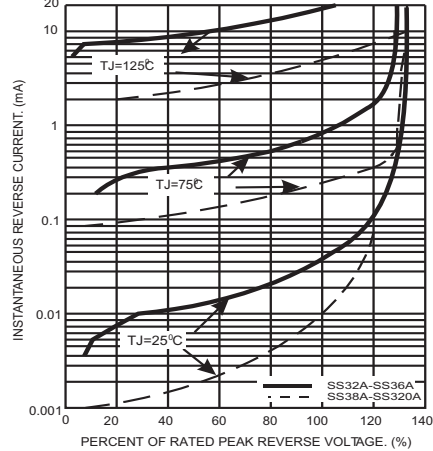


FIG.5- TYPICAL JUNCTION CAPACITANCE

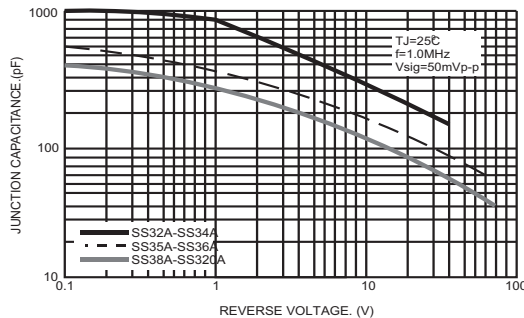
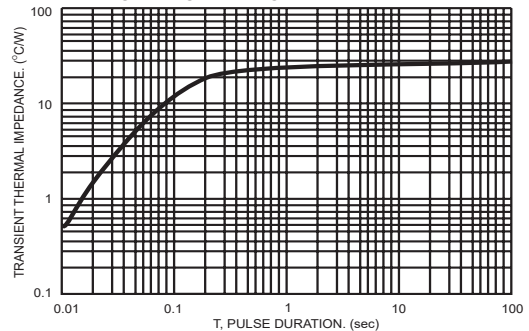


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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