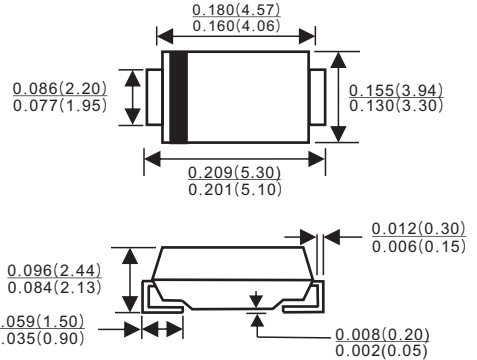




SMB/DO-214AA

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: 0.093 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	SS 32B	SS 33B	SS 34B	SS 35B	SS 36B	SS 38B	SS 39B	SS 310B	SS 315B	SS 320B	UNITS		
Marking code		SS32	SS33	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^2t Rating for Fusing($t < 8.3ms$)	I^2t	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°C	I_R					500					100	μ A	
	T=100°C	I_R					5					-	mA	
	T=125°C	I_R					10					5	mA	
Typical Thermal Resistance (Device mounted on PCB with 10mm×20mm×0.1mm copper pad area)	$R_{\theta JA}$	60										°C/W		
	$R_{\theta JC}$	23												
	$R_{\theta JL}$	25												
Junction temperature range	T_J	-55~150					-55~175						°C	
Storage temperature range	T_{STG}	-55~150					-55~175						°C	



RATINGS AND CHARACTERISTIC CURVES (SS32B THRU SS320B)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

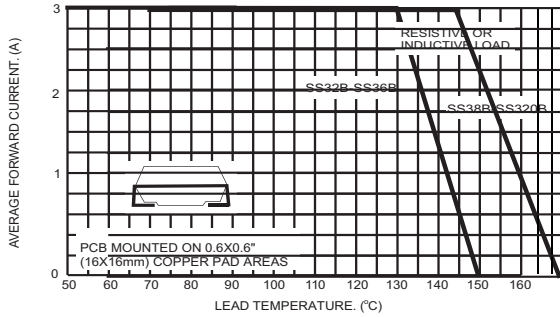


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

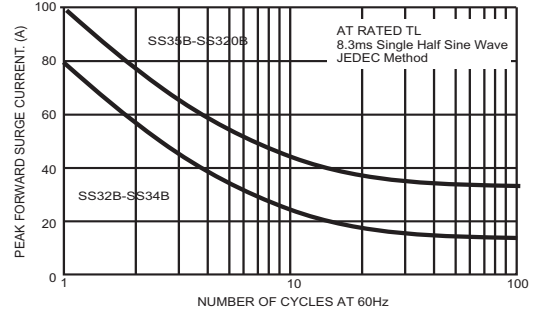


FIG.3- TYPICAL FORWARD CHARACTERISTICS

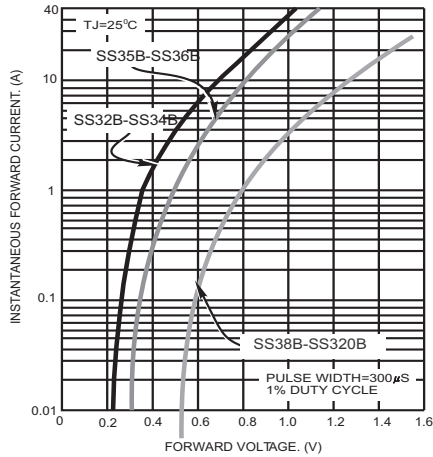


FIG.4- TYPICAL REVERSE CHARACTERISTICS

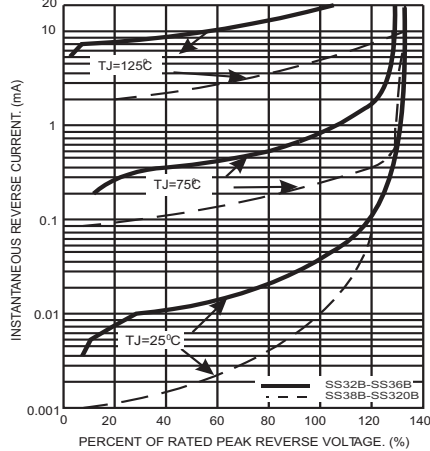


FIG.5- TYPICAL JUNCTION CAPACITANCE

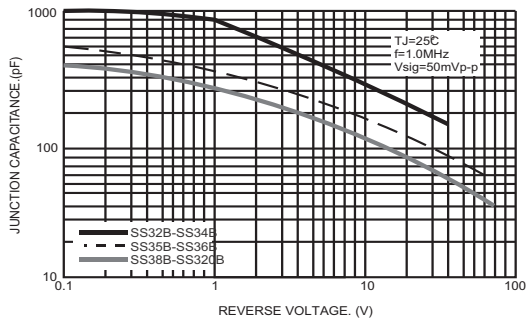
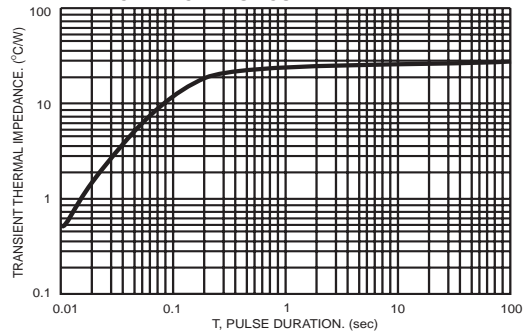


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00