BR33 - BR320

3.0 AMPS. Surface Mount Schottky Barrier Rectifiers

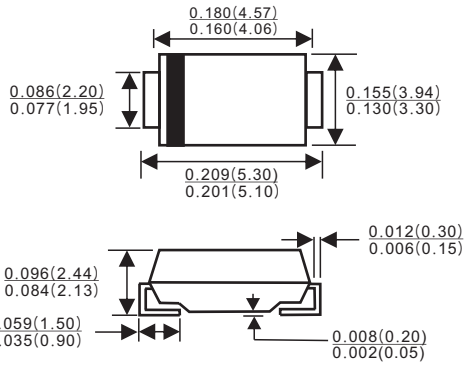
RoHS COMPLIANT



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



Dimensions in inches and(millimeters)

Mechanical Data

- Case: JEDEC SMB/DO-214AA Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- 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	BR 33	BR 34	BR 35	BR 36	BR 39	BR 310	BR 315	BR 320	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	40	50	60	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	21	28	35	42	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	30	40	50	60	90	100	150	200	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}	80								A
Maximum Forward Voltage at 3A (Note 1)	V_F	0.7		0.75			0.85			V
Maximum DC Reverse Current @ T_A =25°C at	I_R	0.05								mA
Rated DC Blocking Voltage @ T_A=125°C		20								mA
Typical Thermal Resistance	$R_{\Theta JL}$ $R_{\theta JA}$	25 75								°C/W
Operating Temperature Range	T_J	-55 to +125								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

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BR33 - BR320

3.0 AMPS. Surface Mount Schottky Barrier Rectifiers

RoHS COMPLIANT

RATINGS AND CHARACTERISTIC CURVES (SS32B THRU SS315B)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

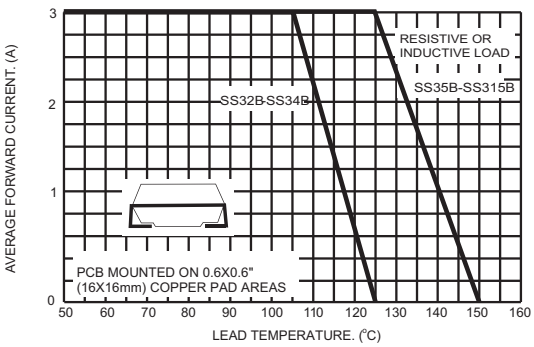


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

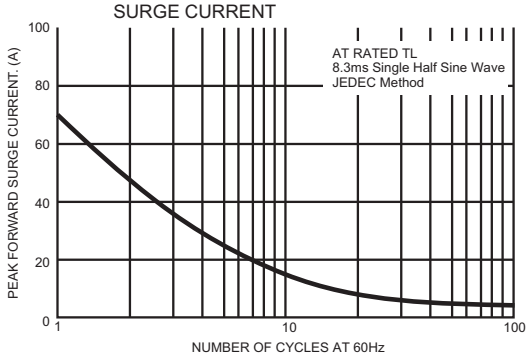


FIG.3- TYPICAL FORWARD CHARACTERISTICS

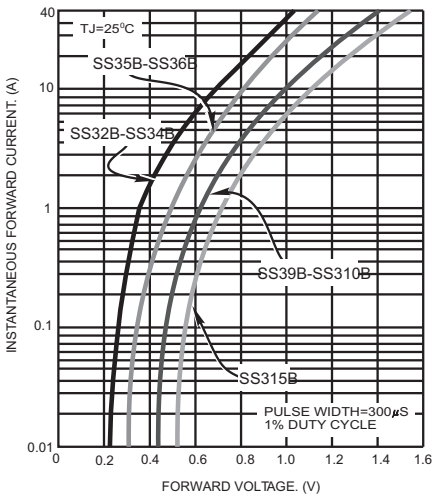


FIG.4- TYPICAL REVERSE CHARACTERISTICS

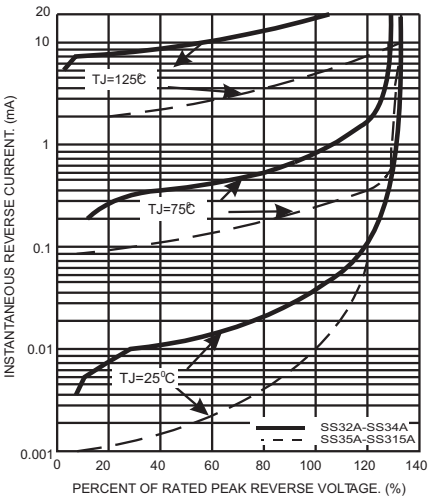


FIG.5- TYPICAL JUNCTION CAPACITANCE

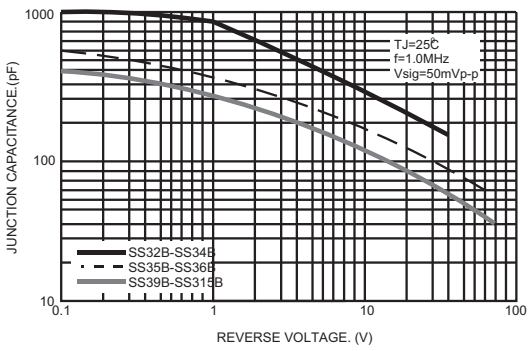
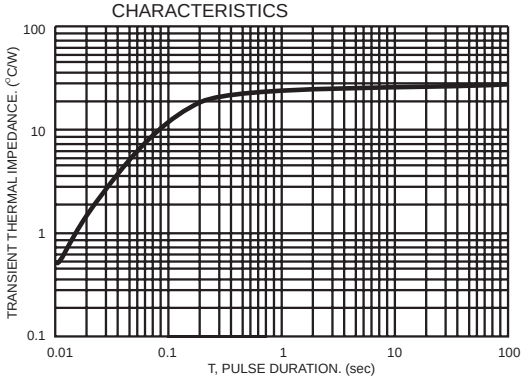


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



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

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