

### SCHOTTKY BARRIER RECTIFIER

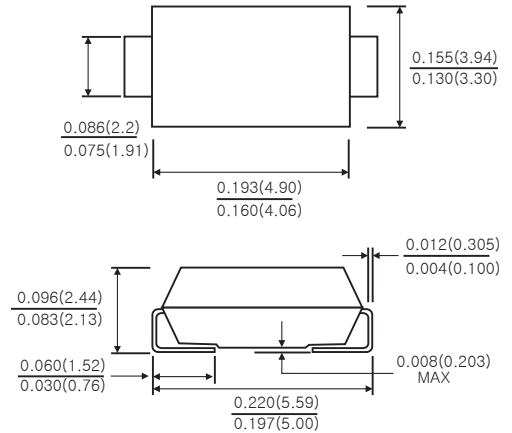
Reverse Voltage – 300Volts  
Forward Current – 3.0Amperes

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS2011/65/EU



#### SMB(DO-214AA)



Dimensions in inches and (millimeters)

#### MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

Parameters	Symbols	SS330B	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	300	Volts
Maximum RMS voltage	$V_{RMS}$	210	Volts
Maximum DC blocking voltage	$V_{DC}$	300	Volts
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	3.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated $T_L$ )	$I_{FSM}$	80.0	Amps
Maximum Forward voltage at 3.0 A(Note 1 )	$V_F$	0.98	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_j=25^\circ\text{C}$	5	$\mu\text{A}$
	$T_j=125^\circ\text{C}$	20	mA
Typical junction capacitance(Note 3)	$C_J$	60	pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	70	$^\circ\text{C/W}$
	$R_{\theta JL}$	18	
Operating junction temperature range	$T_J$	-55 to+150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to+150	$^\circ\text{C}$

Notes: 1.Pulse test: 300 $\mu\text{s}$  pulse width,1% duty cycle

2. Unit mounted on PC board with 5.0mm×5.0 mm (0.013 mm thick) copper pads as heat sink

3.Measured at 1MHz and reverse voltage of 4.0volts

### ■ RATINGS AND CHARACTERISTIC CURVERS

FIG.1-FORWARD CURRENT DERATING CURVE

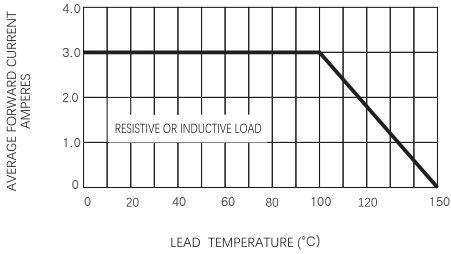


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

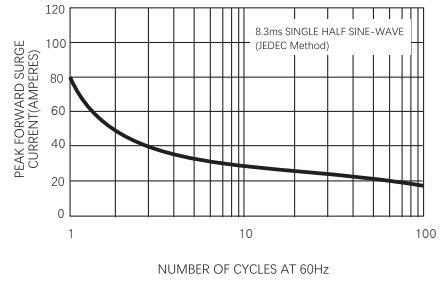


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

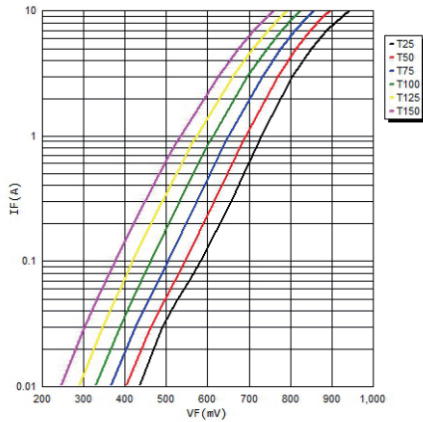


FIG.4-TYPICAL REVERSE CHARACTERISTICS

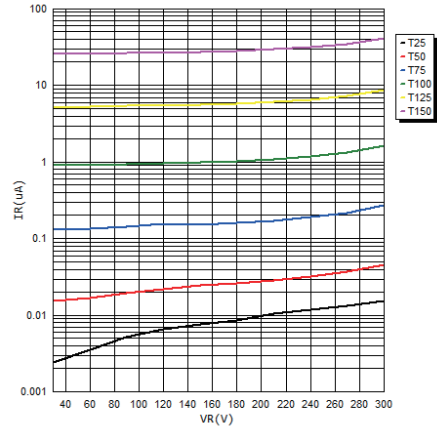


FIG.5-TYPICAL JUNCTION CAPACITANCE

