

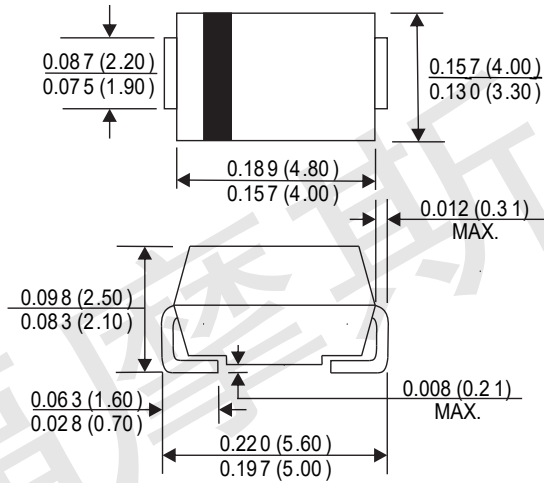
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame Retardant Epoxy Molding Compound.
- Guard ring for overvoltage protection
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- High surge capability

Mechanical Data

- Case: Molded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band dented cathode end
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/Lead Free Version

SMB(DO-214AA)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	MB520L	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Average Rectified Output Current (Note 1) @ $T_L=100^\circ\text{C}$	$I_F(AV)$	5.0	A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120	A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	64.84	A^2s
Forward Voltage @ $I_F=5.0\text{A}$	V_{FM}	0.8	V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.05	mA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$		5	
Typical Junction Capacitance (Note 2)	C_J	350	pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	25	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to + 150	$^\circ\text{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

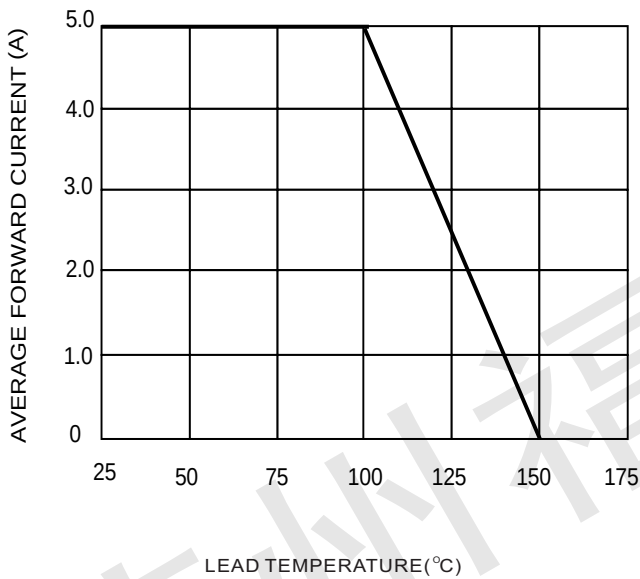


FIG.2-TYPICAL FORWARD CHARACTERISTICS

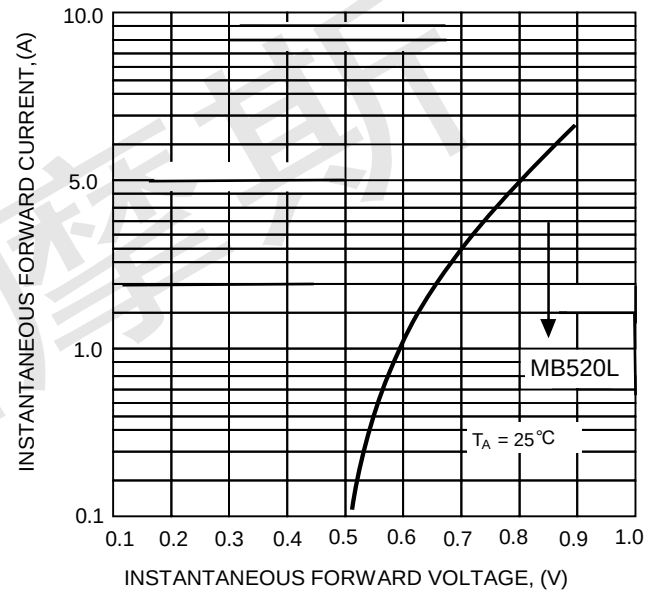


FIG. 3 MAXIMUM NON-REPETITIVE SURGE CURRENT

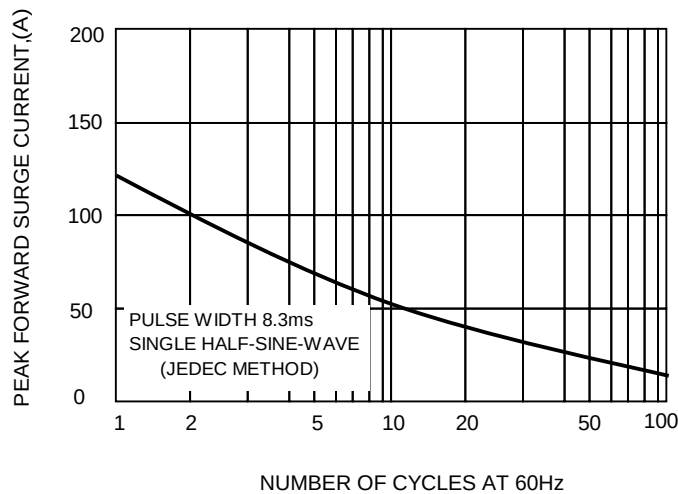


FIG.4 TYPICAL JUNCTION CAPACITANCE

