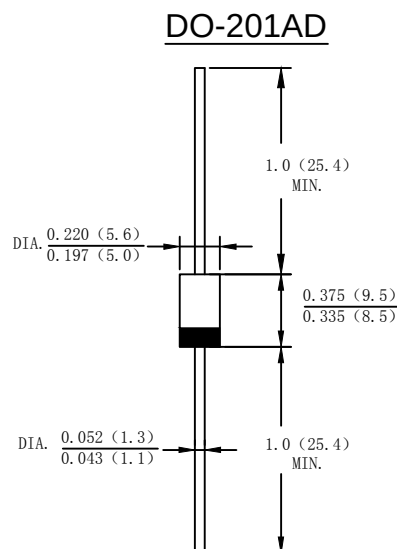


Features

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



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	SB 520U	SB 530U	SB 540U	SB 550U	SB 560U	SB 580U	SB 5100U	SB 5150U	SB 5200U	SB 5250U	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	250	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	250	V
Average Rectified Output Current (Note 1) @T _A =95°C	I _O	5.0										A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	130										A
Forward Voltage @I _F =5.0A	V _{FM}	0.53			0.67		0.82		0.90		0.92	V
Peak Reverse Current @T _A =25°C	I _R	0.2					0.05					mA
At Rated DC Blocking Voltage @T _A =100°C		10.0					5.0					
Typical Junction Capacitance (Note 2)	C _J	500					350					pF
Typical Thermal Resistance Junction to Ambient(Note 1)	R _{θJA}	25										°C/W
Operating Temperature Range	T _J	-55 to + 150										°C
Storage Temperature Range	T _{STG}	-55 to + 150										°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

FIG. 1 - FORWARD CURRENT DERATING CURVE

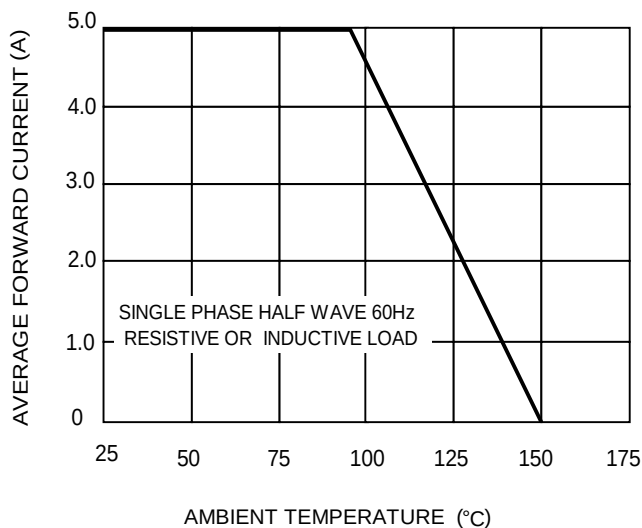


FIG.2-TYPICAL FORWARD CHARACTERISTICS

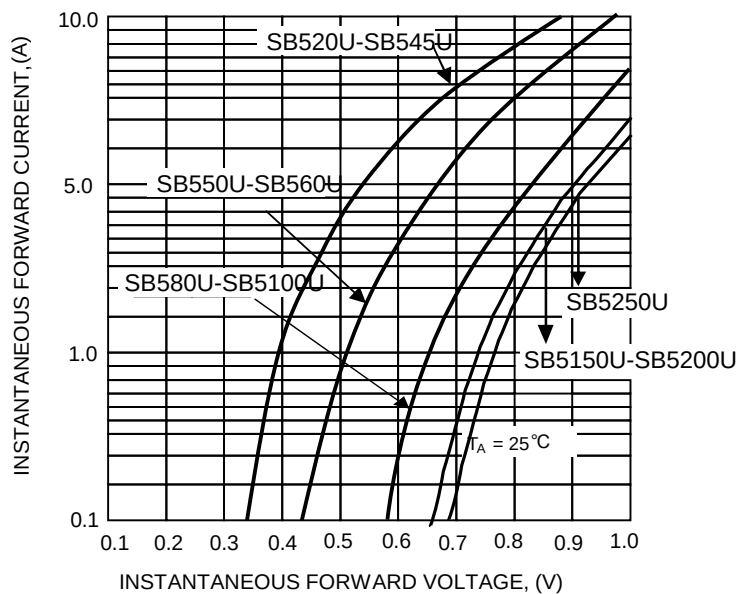


FIG. 3 MAXIMUM NON-REPETITIVE SURGE CURRENT

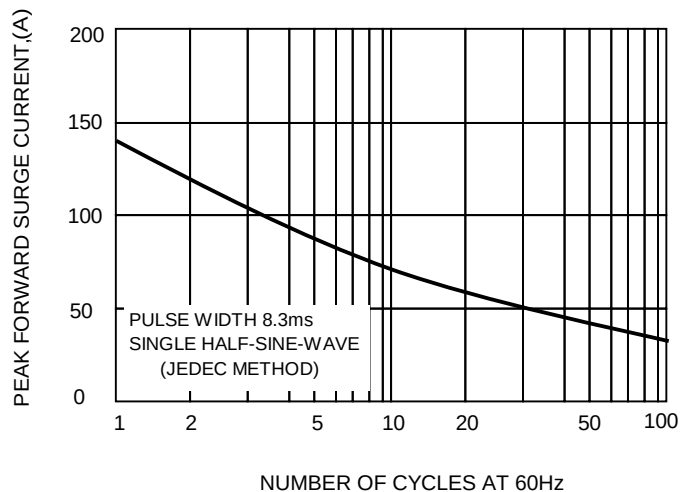


FIG.4 TYPICAL JUNCTION CAPACITANCE

