SB1240

12.0 AMP. Schottky Barrier Rectifiers

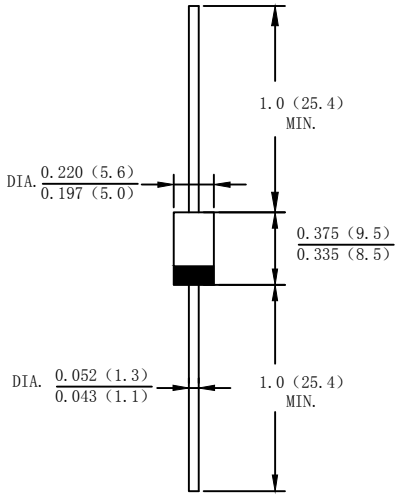
Features

- 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

DO-201AD



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified
Single phase,half wave,60Hz,resistive or inductive load
For capacitive load derate current by 20%

Type Number	SYMBOL	SB1240	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	V
Average Rectified Output Current (Note 1) @T_A=25℃	I_O	12	A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	275	A
Forward Voltage @IF=5.0A	V_{FM}	0.45	V
@IF=12.0A		0.55	
Peak Reverse Current @T_A=25℃	I_R	0.06	mA
At Rated DC Blocking Voltage @T_A=100℃		20	
Thermal Resistance(Typical)	$R_{\theta JC}$	2.5	℃/W
IN DC Forward Mode-Forward Operations without reverse bias, t≤1h (Fig. 1)	T_J	-55 to + 200	℃
Operating Temperature Range VR≤80%VRRM		-55 to + 150	
VR≤50%VRRM		-55 to + 175	
Storage Temperature Range	T_{STG}	-55 to + 150	℃

FIG1: IF(AV)--Tc Derating

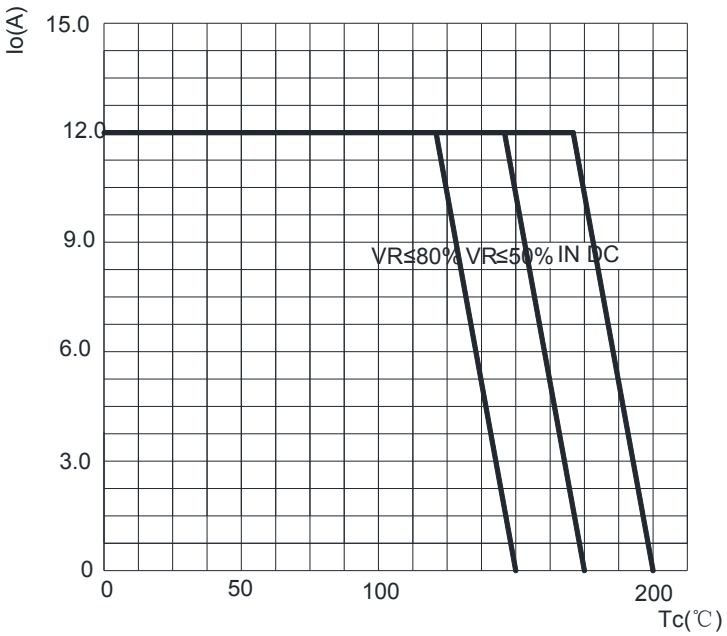


FIG2:Surge Forward Current Capadility

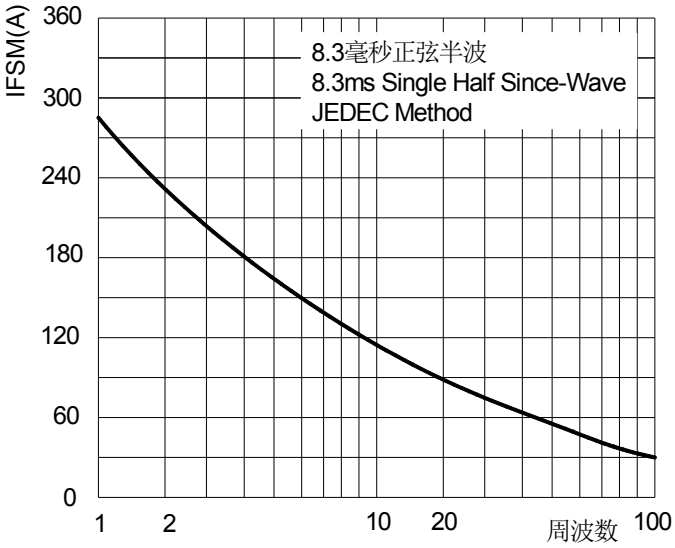


FIG3:Instantaneous Forward Voltage

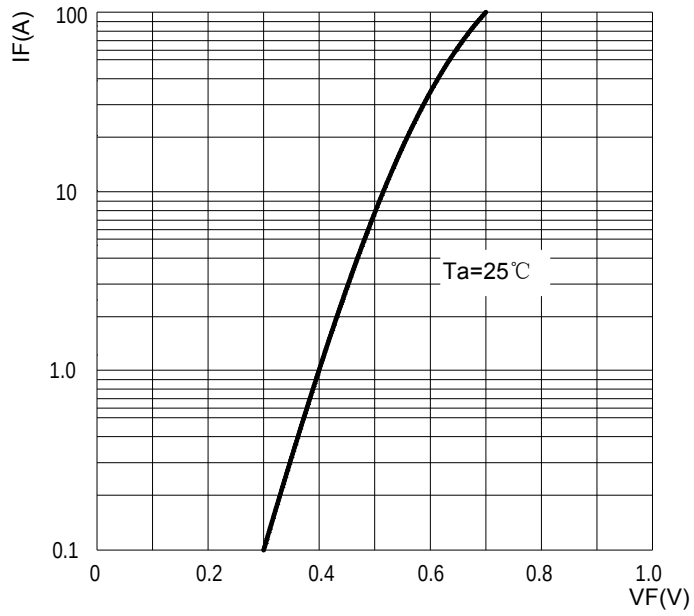


FIG4:Instantaneous Reverse Characteristics