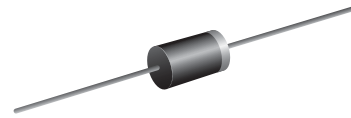


VOLTAGE RANGE: 30- 100V
CURRENT: 12 A

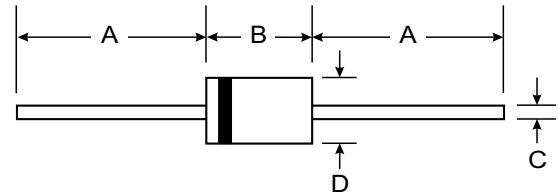


Features

- Metal of silicon rectifier, majority carrier conduction
- Guardring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SB1230S	SB1235S	SB1240S	SB1245S	SB1250S	SB1260S	SB1280S	SB12100S	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current @T _c =95 °C	I _(AV)	12								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	275								A
Peak Forward Voltage at 12A DC (Note1)	V _F	0.55				0.7		0.8		V
Maximum DC Reverse Current @T _j =25°C at Rated DC Blocking Voltage @T _j =100°C	I _R					0.5				mA
Typical Junction Capacitance (Note2)	C _J					450				pF
Typical Thermal Resistance (Note3)	R _{JC}					3.0				°C/w
Operating Temperature Range	T _J					-55 to +200				°C
Storage Temperature Range	T _{STG}					-55 to +200				°C

NOTES: 1. 300us Pulse Width, 2% Duty Cycle.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.
 3. Thermal Resistance Junction to case.

FIG.1-FORWARD CURRENT DERATING CURVE

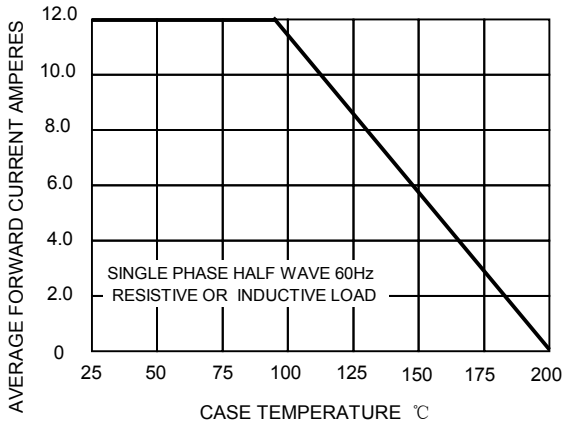


FIG.2-MAXIMUM NON-REPETITIVE SURGE

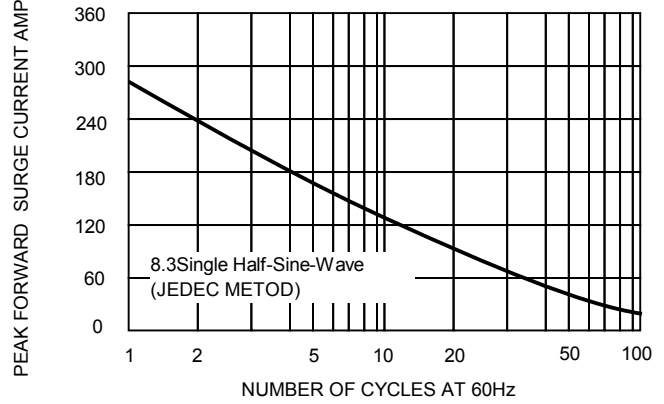


FIG.3-TYPICAL REVER CHARACTERISTICS

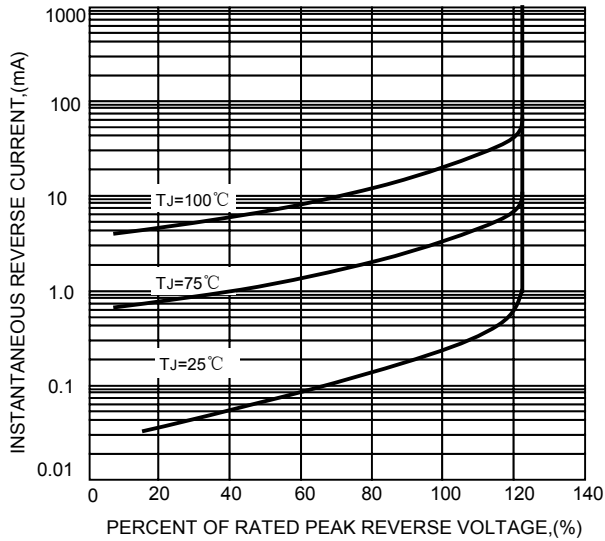


FIG.4-TYPICAL FORWARD CHARACTERISTICS

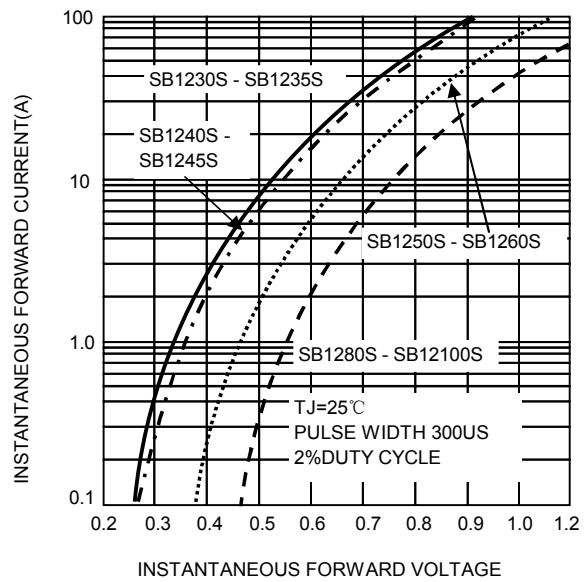


FIG.5-TYPICAL JUNCTION CAPACITANCE

