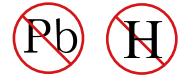




SCHOTTKY BARRIER RECTIFIERS
VOLTAGE 45 to 100 Volts CURRENT - 5.0 Ampere



FEATURES

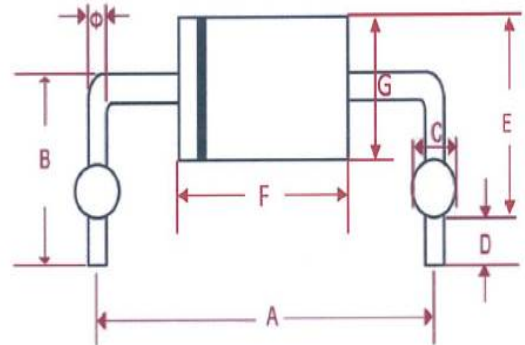
- Ultra Low Forward Voltage Drop, High current capability
- Low reverse current
- Low thermal resistance
- Low power loss and high efficiency
- High forward surge capability
- Ultra fast recovery times, high voltage.
- High temperature soldering : 260°C / 10 seconds at terminals

MECHANICAL DATA

- Case: DO-201AD full molded plastic package
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Molding Compound Flammability Rating:UL 94V-0 Low power loss and high efficiency
- High temperature soldering guaranteed: 260°C 10second
- Plastic package has Underwriters Laboratory
- Exceeds environmental standards of MIL-S-19500/228
- Pb free product at available : 99% Sn above meet RoHS environment

DO-201AD Unit:inch(mm)

MK-18



- A : 20 ± 1mm
- B : 9 ± 1mm
- C : 1.8~2.4mm
- D : 3~3.5mm
- E : 8 ± 1.5mm
- F : 9 ± 0.5mm
- G : 5.3 ± 0.3mm
- Φ : 1.25 ± 0.05mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SB545L	SB550L	SB560L	SB580L	SB5100L	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	45	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	32	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	45	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" Lead Length	I _{F(AV)}	5					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	120	150				A
I ² t Rating for Fusing (t<8.3ms)	I ² t	59.778	93.403				A ² S
Maximum Instantaneous Forward Voltage at 5A	V _F	0.49	0.61	0.71			V
Maximum DC Reverse Current at T _A =25°C	I _R	0.5					mA
at Rated DC Blocking Voltage T _A =100°C		50					
Typical Junction Capacitance (Note 1)	C _J	500			380		pF
Typical Thermal Resistance (Note 2)	R _{θJA}	15			10		°C/W
Operating Junction Temperature Range	T _J	-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
 2. Thermal Resistance Junction to Lead Vertical PCB Mounting 0.375" (9.5mm) Lead Lengths.

DEVICE CHARACTERISTICS

SB545L THRU SB5100L (MK-18)

Typical Performance Characteristics

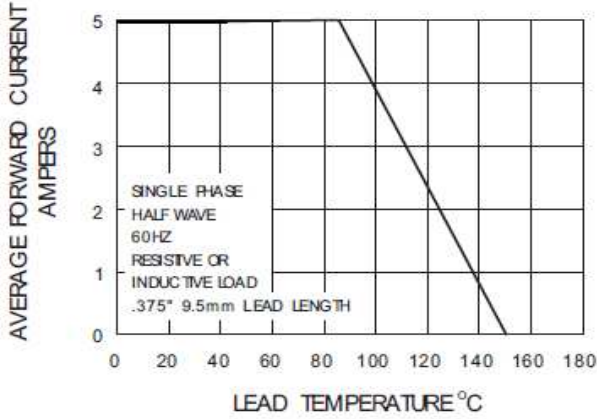


Fig1. Forward Current Derating Curve

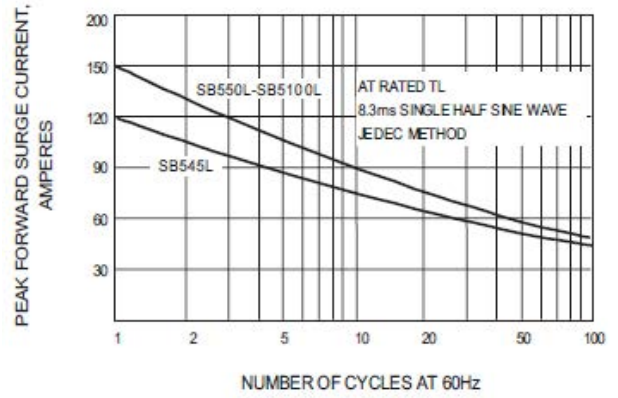


Fig2. Maximum Non-repetitive Peak Forward surge Current

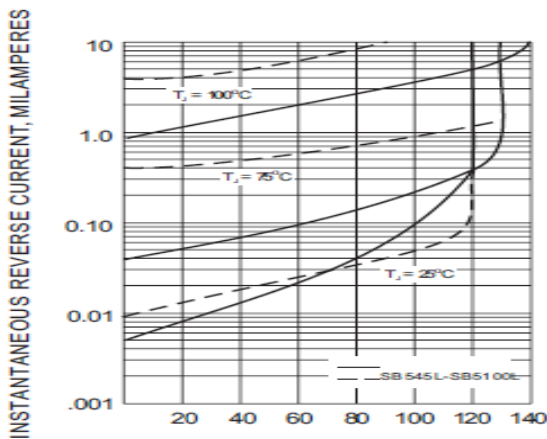


Fig3. Typical Reverse Characteristic

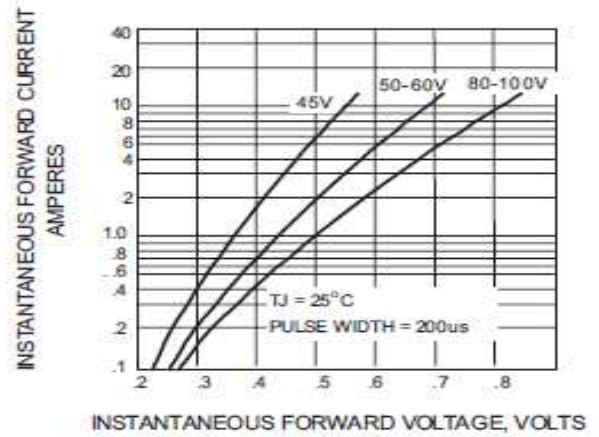


Fig4. Typical Instantaneous Forward Characteristics

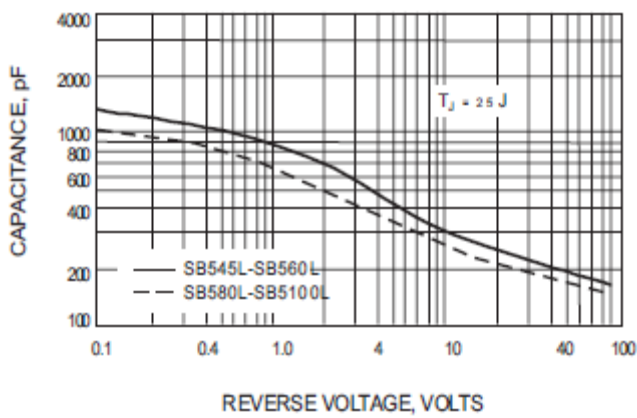


Fig5. Typical Junction Capacitance