

# Schottky Barrier Rectifier

## 3A 40~200V DO-214AA SMB

SL3-B Series

MERITEK

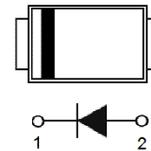
### FEATURES

- Low Power Loss, High Efficiency
- High Forward Surge Current Capacity
- Metal to Silicon Rectifier and Majority Carrier Conduction
- Built-In Strain Relief
- Application: Low Voltage, High Frequency Inverters, Free Wheeling and Polarity Protection



### MECHANICAL DATA

- Case: DO-214AA, SMB, Molded Epoxy Meets UL94V-0
- Terminals: Solderable Per MIL-STD-750, Method 2026
- Polarity: Color Band denotes Cathode end



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

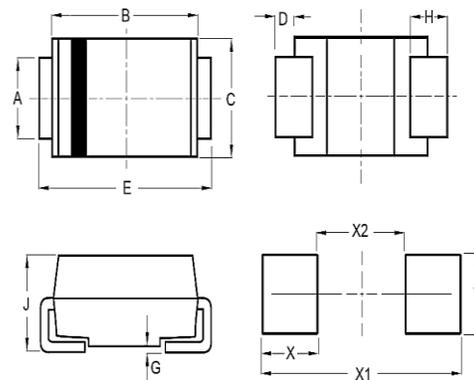
Parameter	Symbol	SL 34B	SL 345B	SL 35B	SL 36B	SL 38B	SL 310B	SL 315B	SL 320B	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	32	35	42	56	71	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	45	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at $T_L$	$I_{(AV)}$	3.0								A
Forward Surge Current, 8.3ms single half-sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80.0								A
Maximum Forward Voltage at $I_F=3.0A$	$V_F$	0.45		0.55		0.75		0.85		V
Maximum Reverse Current	$V_R=V_{RRM}, T_A=25^{\circ}C$	0.5								mA
	$V_R=V_{RRM}, T_A=100^{\circ}C$	10.0								
Typical Thermal Resistance	$R_{\theta JA}$	55.0								$^{\circ}C/W$
Diode Junction Capacitor	$C_J$	500								pF
Operating Junction Temperature Range	$T_J$	-55 to +125			-55 to +150					$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 to +150								$^{\circ}C$

Note:

1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Thermal resistance from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 x 5.0 mm) copper pad areas

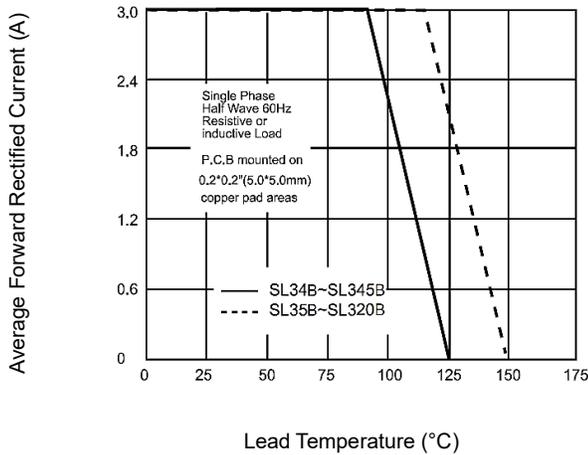
### DIMENSIONS

Item	Min. (mm)	Max. (mm)
A	1.800	2.200
B	4.050	4.650
C	3.300	3.940
D	0.152	0.305
E	5.140	5.560
G	0.000	0.203
H	0.760	1.520
J	2.050	2.450
X	1.50	
X1	5.80	
X2	2.80	
Y	2.00	

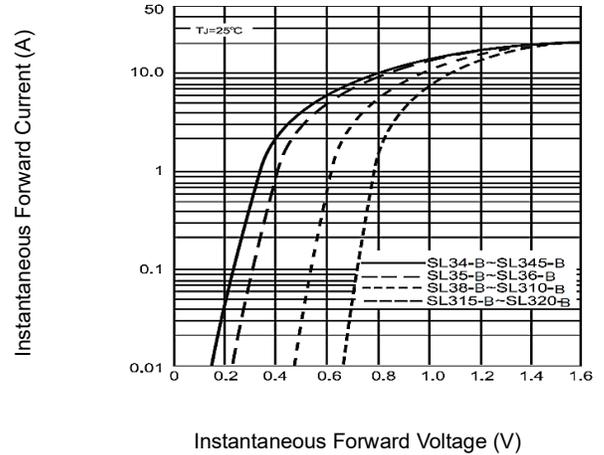


## CHARACTERISTIC CURVES

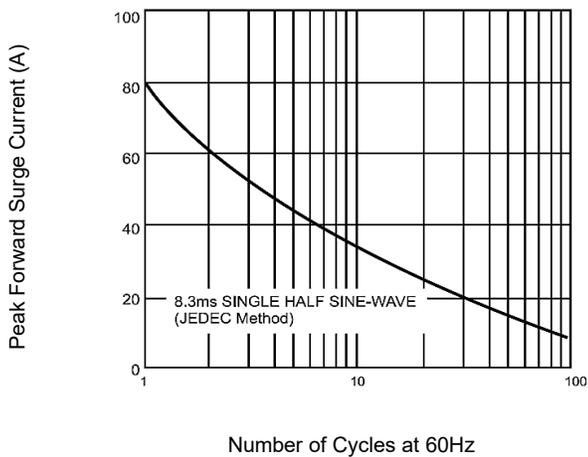
#### Typical Forward Current Derating Curve



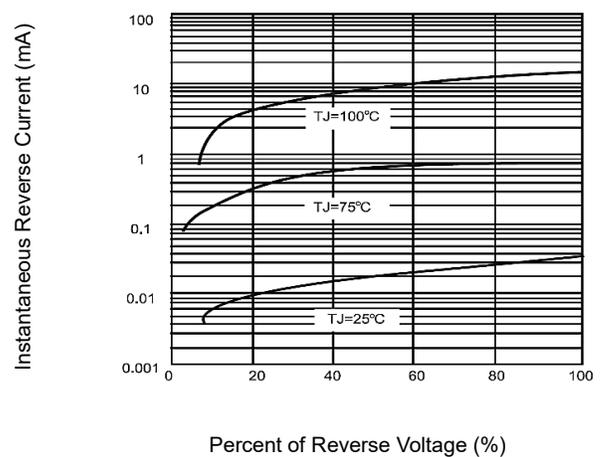
#### Typical Instantaneous Forward Characteristics



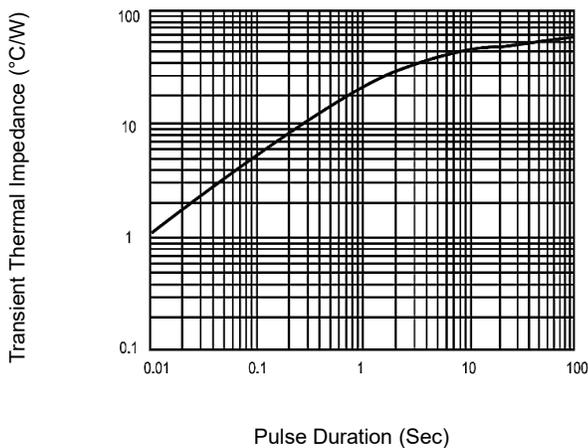
#### Maximum Non-Repetitive Forward Surge Current



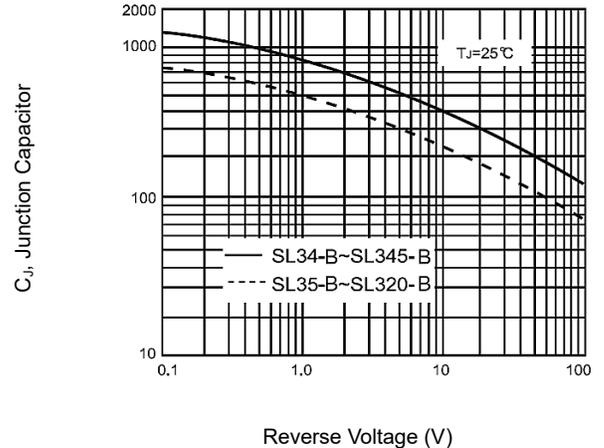
#### Typical Reverse Characteristics



#### Typical Transient Thermal Impedance



#### Typical Junction Capacitor



\*Specifications subject to change without notice