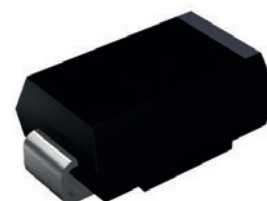


Features

- Schottky barrier rectifiers
- Low leakage current
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- Halogen-free according to IEC 61249-2-21 definition
- High temperature soldering guaranteed: 260°C/10 seconds



RoHS
COMPLIANT



DO-214AA (SMB)

Applications

For use in low voltage, high frequency inverters, free-wheeling and polarity protection application.

Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	SL32B	SL33B	SL34B	SL35B	SL36B	SL37B	SL38B	SL39B	SL310B	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	70	80	90	100	V
Maximum Average Forward Rectified Current	I _{F(AV)}	3									A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	80									A
Typical Thermal Resistance, Junction to Ambient ¹	R _{θJA}	85									°C/W
Typical Thermal Resistance, Junction to Case ¹	R _{θJC}	15									
Typical Thermal Resistance, Junction to Lead ¹	R _{θJL}	20									
Operating Junction Temperature Range	T _J	-55 to +125			-55 to +150						°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

Notes:

1. Mounted on copper pad area of 0.2 x 0.2" (5.0 x 5.0mm) to each terminal.

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	SL32B	SL33B	SL34B	SL35B	SL36B	SL37B	SL38B	SL39B	SL310B	Unit
Forward Drop Voltage	V _F	I _F =3A	0.45			0.50		0.75				V
Reverse Leakage Current @ V _R	I _R	T _J =25°C	0.2			0.15						mA
		T _J =100°C	20			50						
Typical Junction Capacitance	C _J	4.0V, 1MHz	220									pF

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

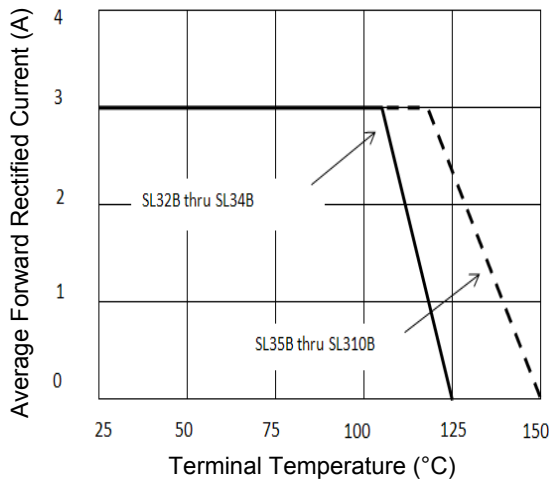


Figure 1. Forward Current Derating Curve

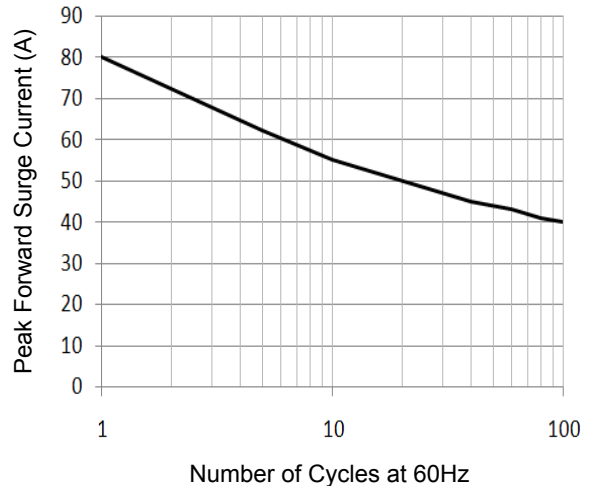


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current



Figure 3. Typical Instantaneous Forward Characteristics

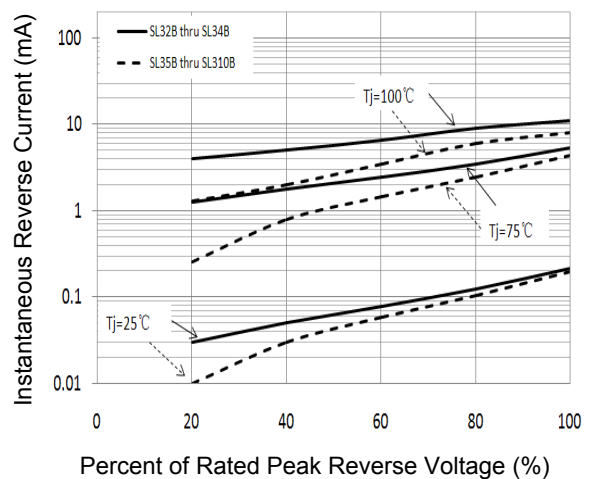


Figure 4. Typical Reverse Characteristics

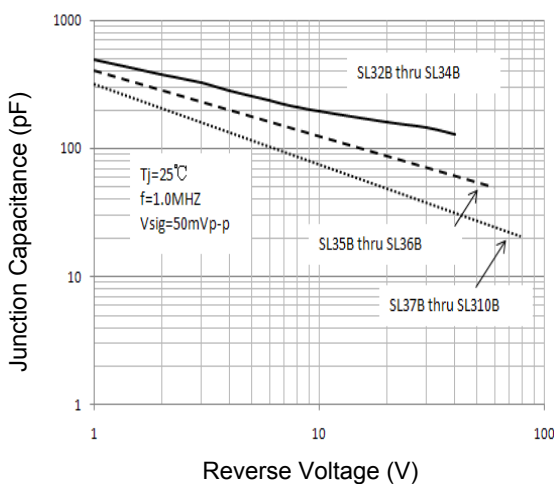


Figure 5. Typical Junction Capacitance

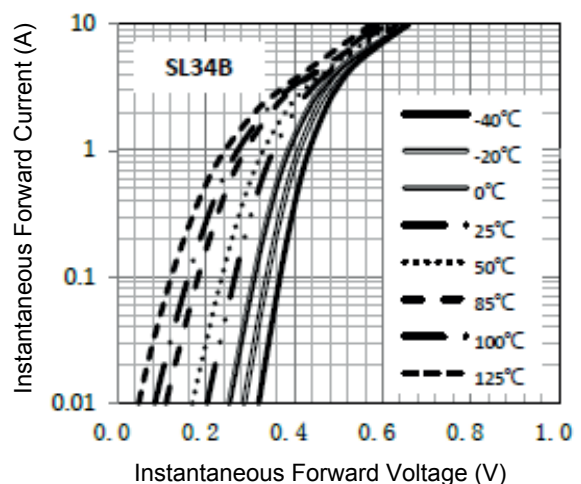
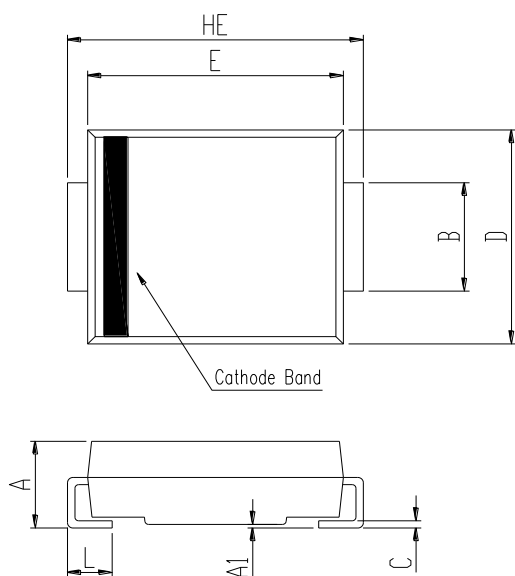


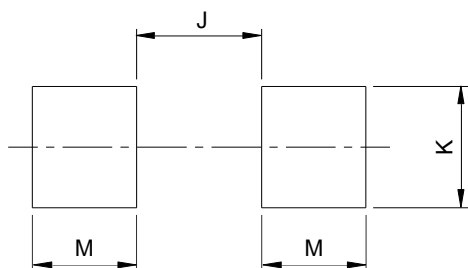
Figure 6. Typical Instantaneous Forward Characteristics

Package Outline Dimensions DO-214AA (SMB)



SMB (DO-214AA)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.99	2.61	0.078	0.103
A1	0.05	0.20	0.002	0.008
B	1.93	2.08	0.076	0.082
C	0.15	0.31	0.006	0.012
D	3.48	3.73	0.137	0.147
E	4.25	4.75	0.167	0.187
HE	5.26	5.46	0.207	0.215
L	0.90	1.41	0.035	0.056

Recommended Pad Layout



SMB Recommended Pad Layout (Reference Only)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.60	-	0.102
K	2.20	-	0.087	-
M	1.80	-	0.071	-

Order Information

Device	Package	Marking	Carrier	Quantity
SL32B	DO-214AA (SMB)	SL32B	Tape & Reel	3,000pcs / Reel
SL33B	DO-214AA (SMB)	SL33B	Tape & Reel	3,000pcs / Reel
SL34B	DO-214AA (SMB)	SL34B	Tape & Reel	3,000pcs / Reel
SL35B	DO-214AA (SMB)	SL35B	Tape & Reel	3,000pcs / Reel
SL36B	DO-214AA (SMB)	SL36B	Tape & Reel	3,000pcs / Reel
SL37B	DO-214AA (SMB)	SL37B	Tape & Reel	3,000pcs / Reel
SL38B	DO-214AA (SMB)	SL38B	Tape & Reel	3,000pcs / Reel
SL39B	DO-214AA (SMB)	SL39B	Tape & Reel	3,000pcs / Reel
SL310B	DO-214AA (SMB)	SL310B	Tape & Reel	3,000pcs / Reel