SL22 THRU SL24

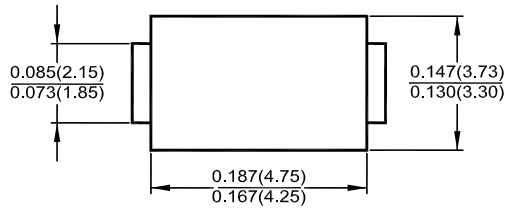
Surface Mount Schottky Barrier Rectifier

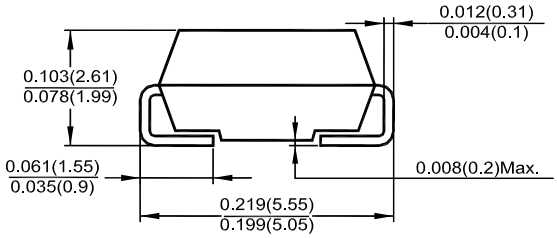
Reverse Voltage - 20 to 40 V
Forward Current - 2 A

Features

- For surface mounted application
- Low forward voltage drop
- High forward surge current capability
- The plastic package carries U/L Classification 94V-0

SMB (DO-214AA)





Dimensions in inches and (millimeters)

Mechanical Data

- **Case:** (SMB)DO-214AA molded plastic body
- **Terminal:** Solder plated, solderable per MIL-STD-202, Method 208
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	SL22	SL23	SL24	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2			A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50			A
Maximum Instantaneous Forward Voltage at 2 A [1]	V_F	0.44			V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25 °C T_A = 100 °C	I_R	3 150			mA
Maximum Thermal Resistance [2]	$R_{\theta JL}$ $R_{\theta JA}$	25 75			°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125			°C
Storage Temperature Range	T_{stg}	- 55 to + 150			°C

[1] Pulse test: Pulse width 300 μs,duty cycle 1 %.
[2] P.C.B mounted with 0.2 X 0.2"(5 X 5 mm) copper pad areas.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

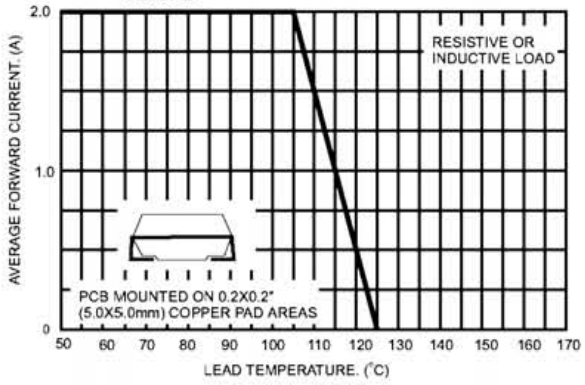


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

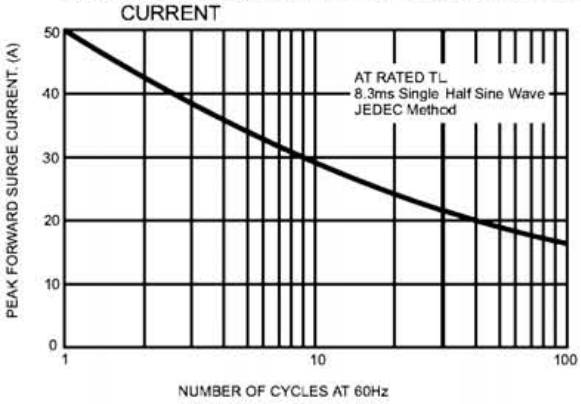


FIG.3- TYPICAL FORWARD CHARACTERISTICS

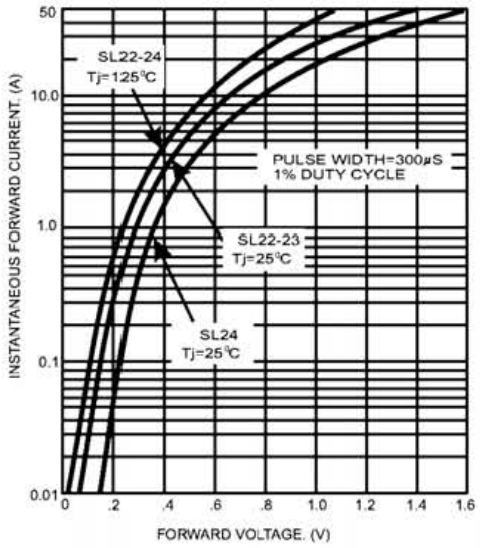


FIG.4- TYPICAL REVERSE CHARACTERISTICS