

# SL22 THRU SL24

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 40 V

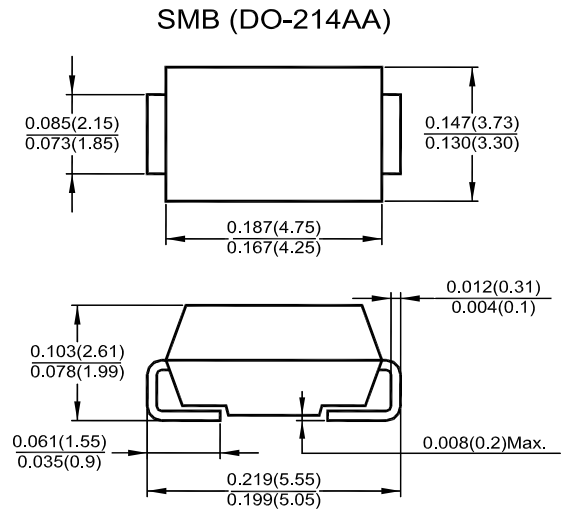
Forward Current - 2 A

### Features

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

### 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



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

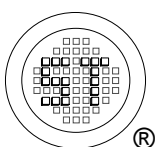
Single phase, half wave, 60 Hz, resistive or inductive load.

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 <sup>1)</sup>	$V_F$	0.44			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25\text{ }^\circ\text{C}$ $T_A = 100\text{ }^\circ\text{C}$	$I_R$	3 150			mA
Maximum Thermal Resistance <sup>2)</sup>	$R_{\theta JL}$ $R_{\theta JA}$	25 75			$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	- 55 to + 125			$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150			$^\circ\text{C}$

<sup>1)</sup> Pulse test: Pulse width 300  $\mu\text{s}$ , duty cycle 1 %.

<sup>2)</sup> P.C.B mounted with 0.2 X 0.2"(5 X 5 mm) copper pad areas.



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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

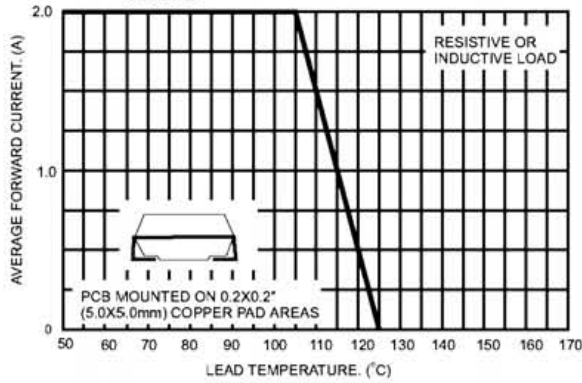


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

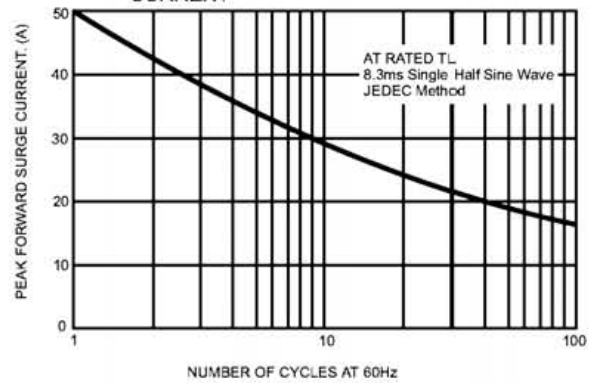


FIG.3- TYPICAL FORWARD CHARACTERISTICS

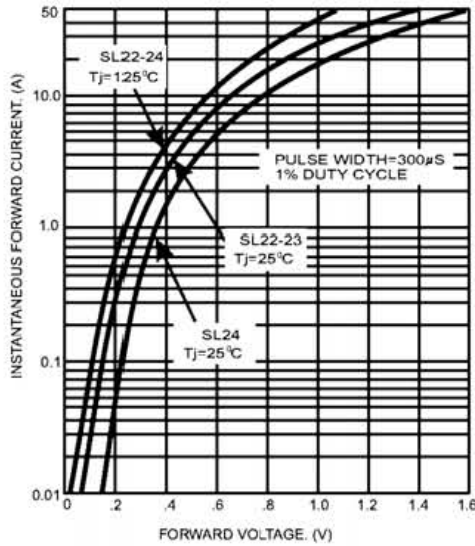
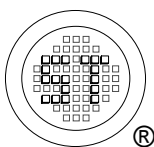
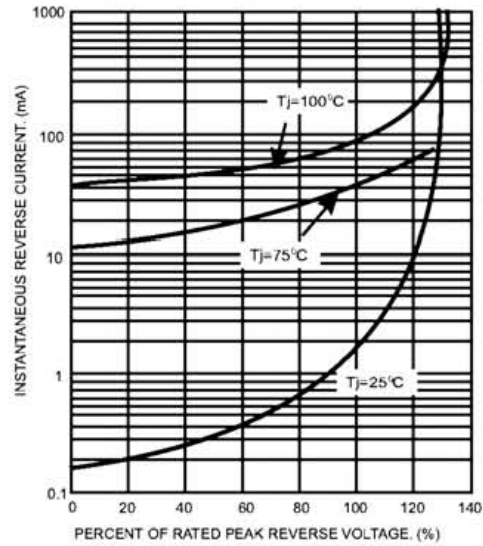


FIG.4- TYPICAL REVERSE CHARACTERISTICS



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