

SL22 THRU SL24

VOLTAGE 20V ~ 40V

2.0AMP Surface Mount Low V_F Schottky Barrier Rectifiers

FEATURES

- * For surface mount applications
- * Epitaxial construction
- * Very low forward voltage drop
- * For use in low voltage, high frequency inverter, free wheeling

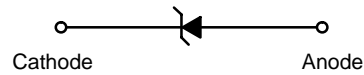
DO- 214AA

SMB



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V- 0 rate flame retardant
- * Polarity: Color band denotes cathode end
- * Weight: 0.093 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| TYPE NUMBER | SL22 | SL23 | SL24 | UNITS |
|---|-------------|-------|-------|---------------------------|
| Maximum Repetitive Peak Reverse Voltage | 20 | 30 | 40 | V |
| Maximum RMS Voltage | 14 | 21 | 28 | V |
| Maximum DC Blocking Voltage | 20 | 30 | 40 | V |
| Maximum Average Forward Rectified Current See Fig. 1 | 2.0 | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine- wave superimposed on rated load (JEDEC method) | 50 | | | A |
| Maximum Instantaneous Forward Voltage at 2.0A (Note 1) | 0.385 | 0.385 | 0.400 | V |
| Maximum DC Reverse Current $T_a=25^\circ\text{C}$ | 3.0 | | | mA |
| at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$ | 150 | | | mA |
| Typical Thermal Resistance RJA (Note 2) | 75 | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range T_j | - 55 — +125 | | | $^\circ\text{C}$ |
| Storage Temperature Range T_{stg} | - 55 — +150 | | | $^\circ\text{C}$ |

NOTES

1. Pulse test with PW=300us, 1% Duty Cycle
2. Thermal Resistance Junction to Ambient.
Measured on P.C. Board with 5 x 5 mm copper pad areas.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

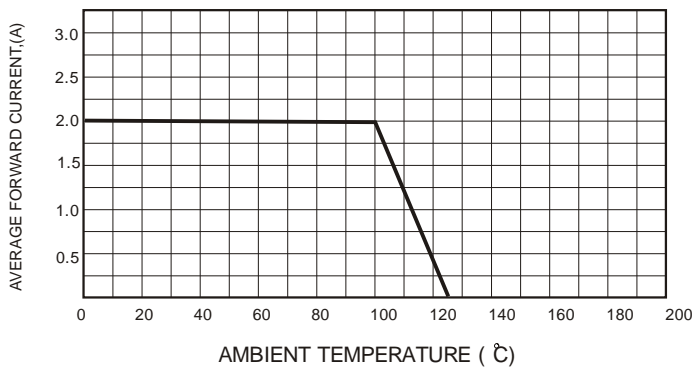


FIG.2-TYPICAL FORWARD CHARACTERISTICS

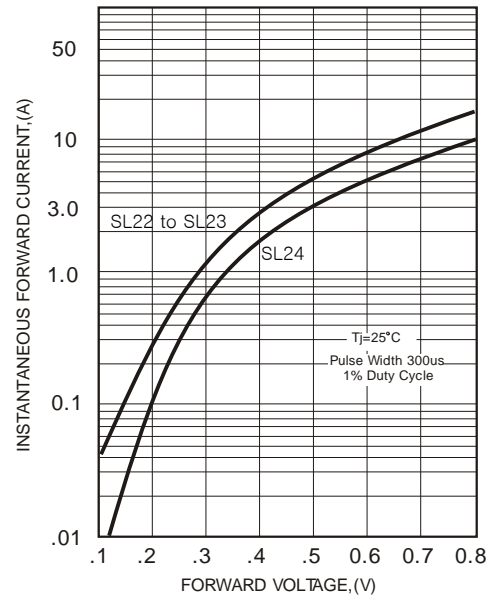


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

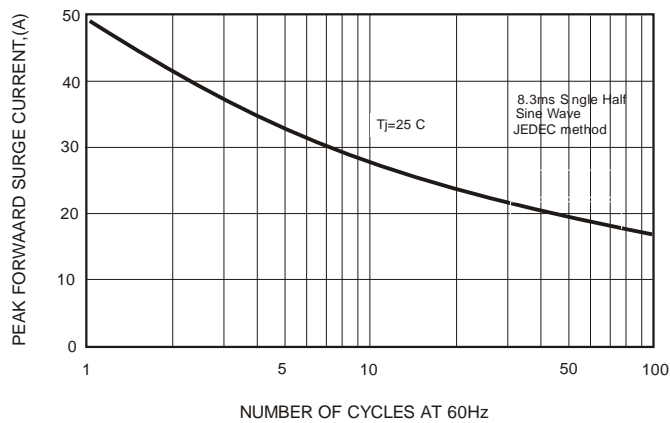


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

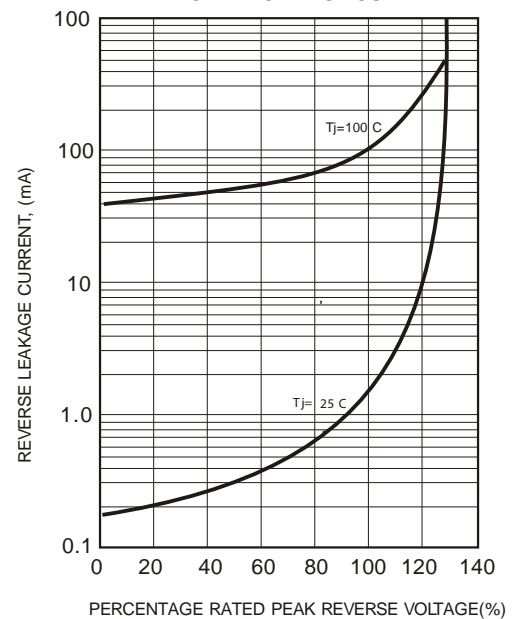
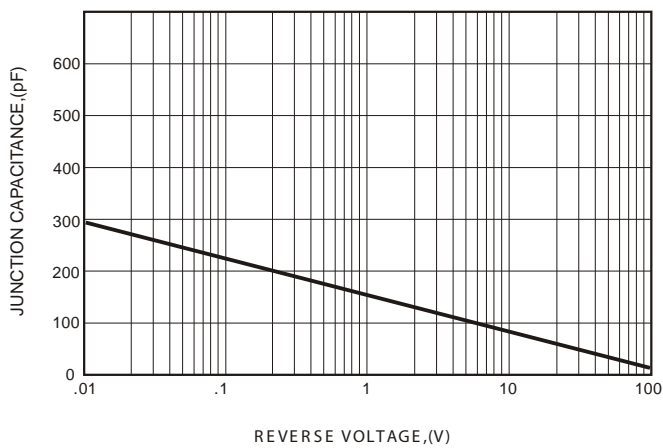


FIG.4-TYPICAL JUNCTION CAPACITANCE



Package Dimensions in inches and (millimeters)

