

**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

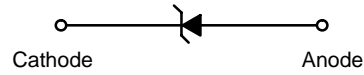
DO- 214AA

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			°C/W
Operating Temperature Range $T_j$	- 55 — +125			°C
Storage Temperature Range $T_{stg}$	- 55 — +150			°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

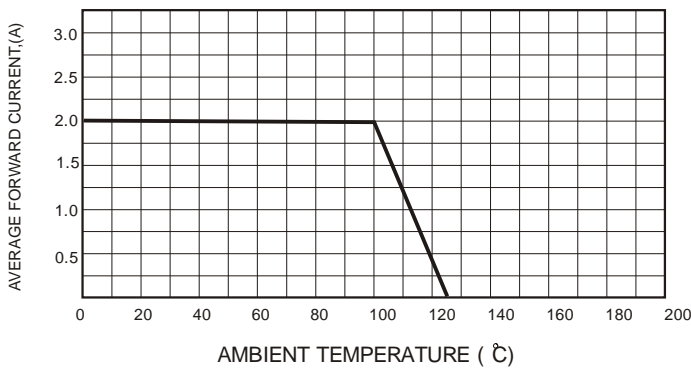


FIG.2-TYPICAL FORWARD CHARACTERISTICS

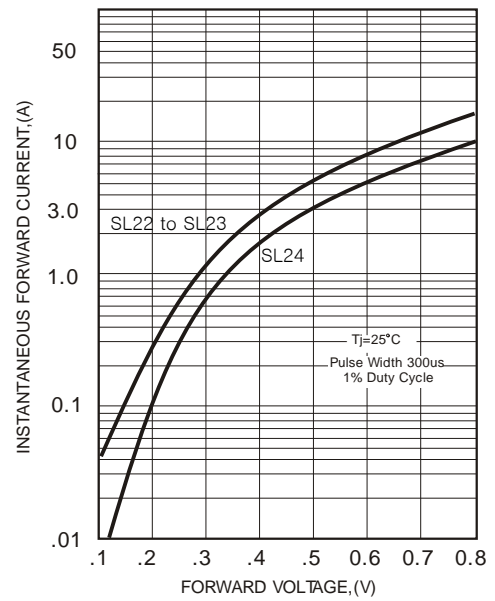


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

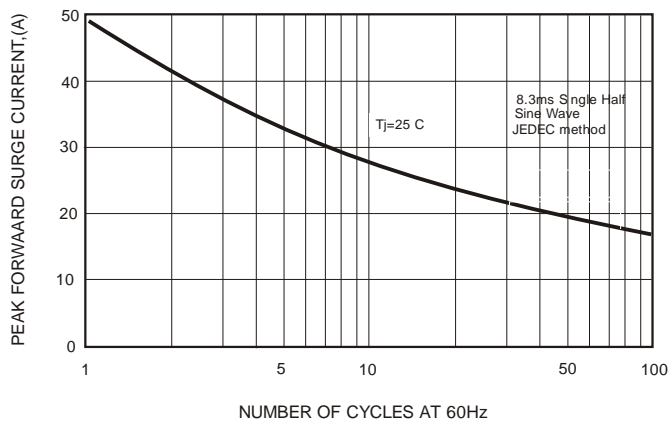


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

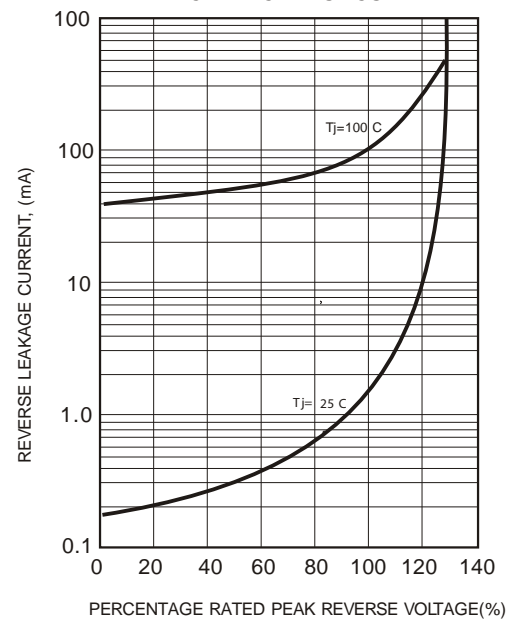
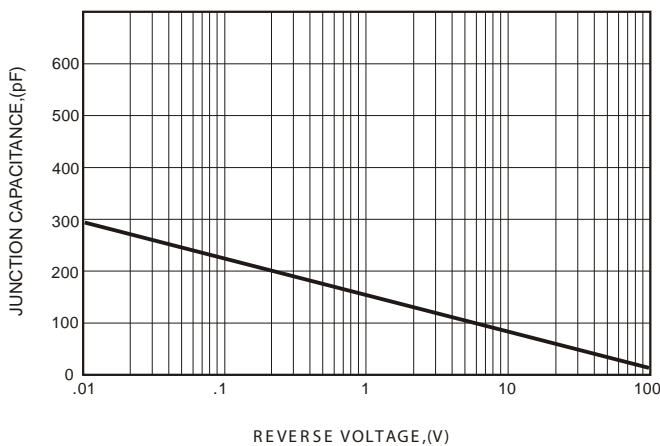


FIG.4-TYPICAL JUNCTION CAPACITANCE



Package Dimensions in inches and (millimeters)

