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 Ta=25 C	3.0			mA
at Rated DC Blocking Voltage Ta=100 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

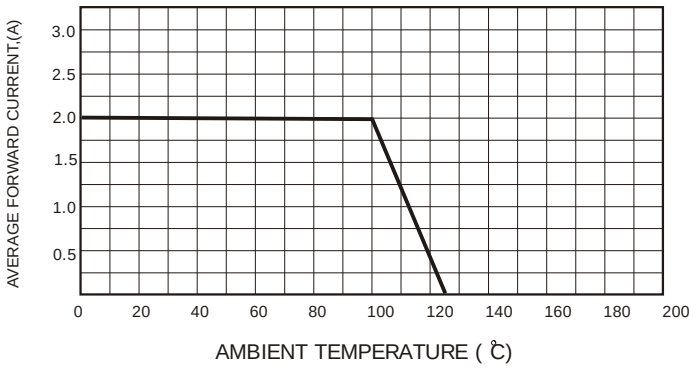


FIG.2-TYPICAL FORWARD CHARACTERISTICS

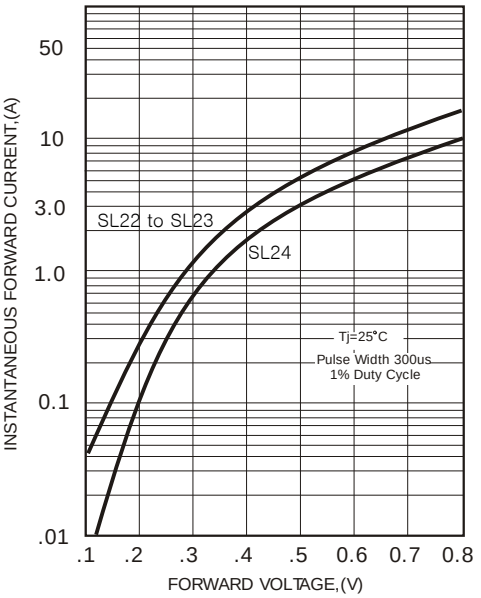


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

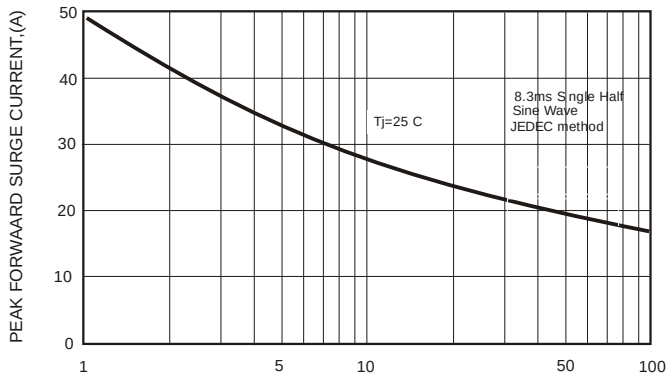


FIG.4-TYPICAL JUNCTION CAPACITANCE

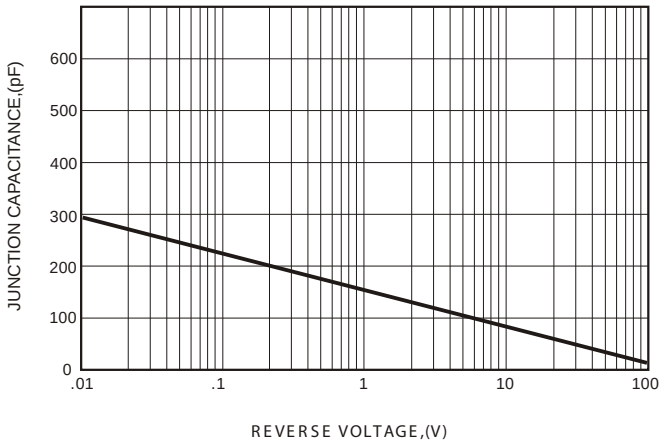
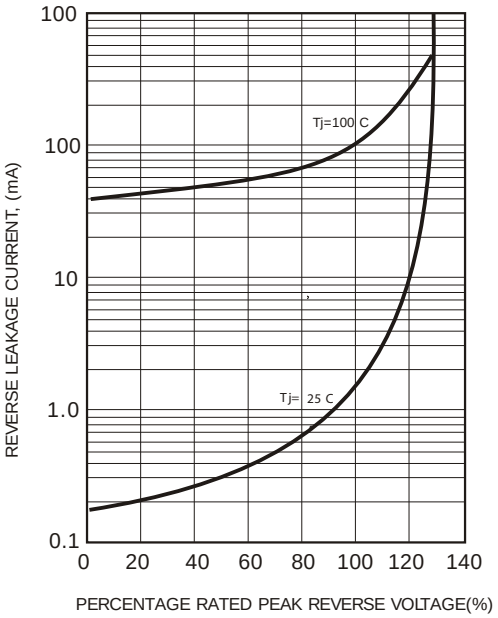
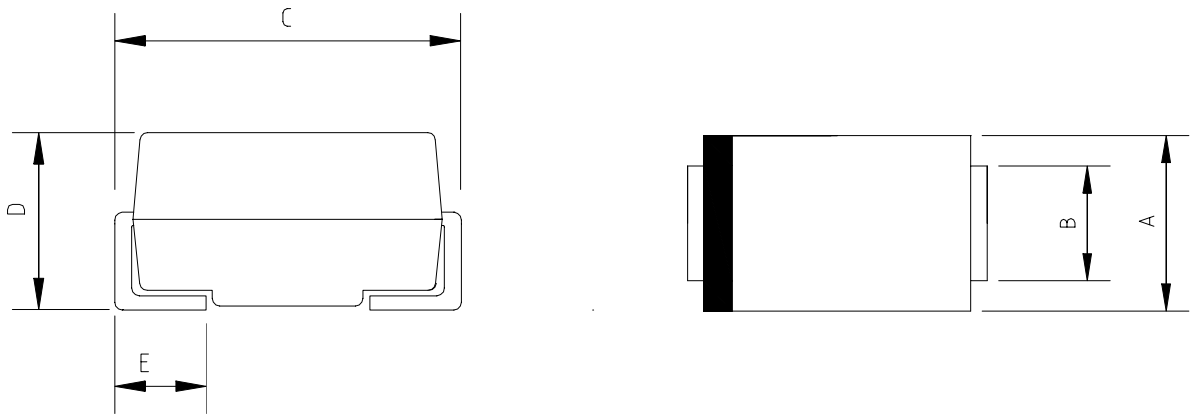


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Package Dimensions in inches and (millmeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
A	0.137	0.147	3.48	3.73
B	0.760	0.820	1.93	2.08
C	0.207	0.215	5.28	5.46
D	0.78	1.030	1.99	2.61
E	0.35	0.56	0.90	1.41

Note:
DO-214AA
molded plastic case
The marking band indicates the cathode