TRANSYS ELECTRONICS LIMITED

SL22 THRU SL24

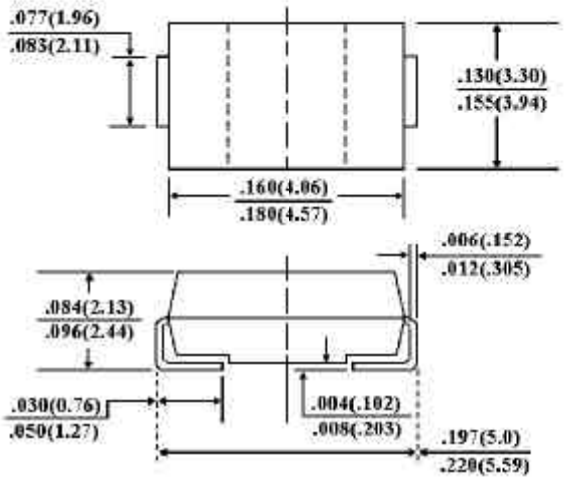
LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 to 40 Volts CURRENT - 2.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammab ity Classification 94V-O
- For surface mounted applications
- Low profile package
- Bu t-in strain relief
- Metal to s icon rectifier majority carrier conduction
- Low power loss, High efficiency
- High current capab ity, low V_F
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection app cations
- High temperature soldering guaranteed: 260 ¢J/10 seconds at terminals

SMB/DO-214AA



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode

Standard packaging: 12mm tape (EIA-481)

Weight: 0.003 ounce, 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

Resistive or inductive load.

	SYMBOLS	SL22	SL23	SL24	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	Volts
Maximum Average Forward Rectified Current at T_L (See Figure 1)	$I_{(AV)}$	2.0			Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	50.0			Amps
Maximum Instantaneous Forward Voltage at 2.0A (Note 1)	V_F	0.38	0.38	0.40	Volts
Maximum DC Reverse Current T_A=25 ¢J(Note 1) At Rated DC Blocking Voltage T_A=100 ¢J	I_R	0.5 20.0			mA
Maximum Thermal Resistance (Note 2)	R £KJL R £KJA	17 75			¢J/W
Operating Junction Temperature Range	T_J	-50 to +125			¢J
Storage Temperature Range	T_{STG}	-50 to +150			¢J

NOTES:

1. Pulse Test with PW=300 £gs, 1% Duty Cycle.
2. Mounted on P.C.Board with 8.0mm^2 (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

SL22 THRU S210

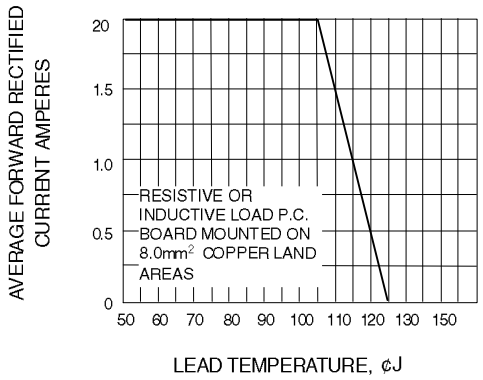


Fig. 1-FORWARD CURRENT DERATING CURVE

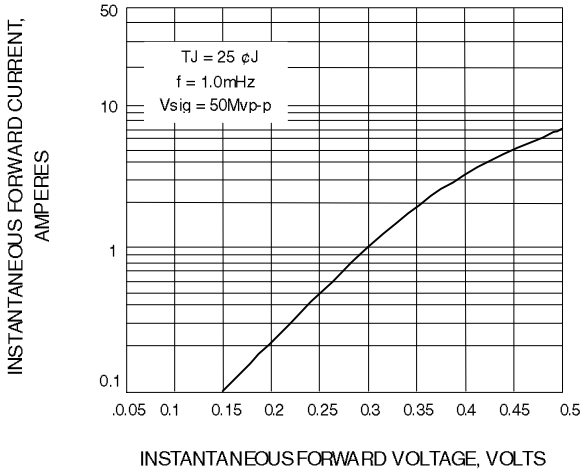


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

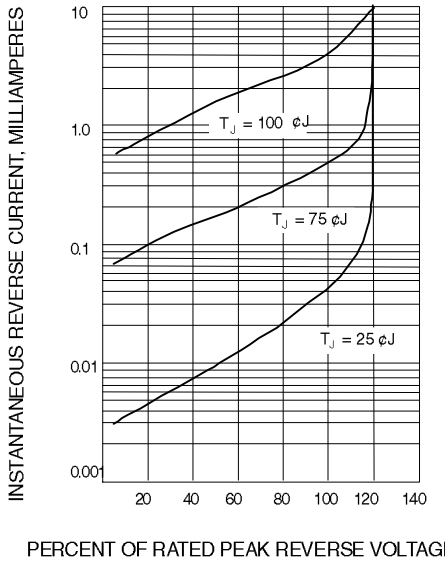


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

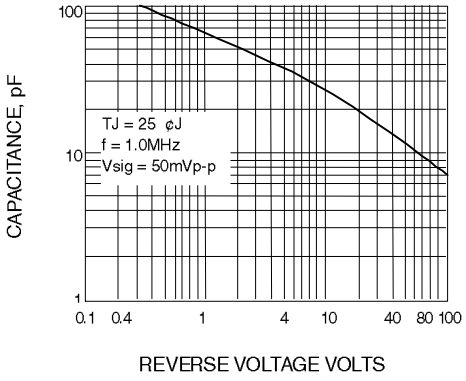


Fig. 4-TYPICAL JUNCTION CAPACITANCE

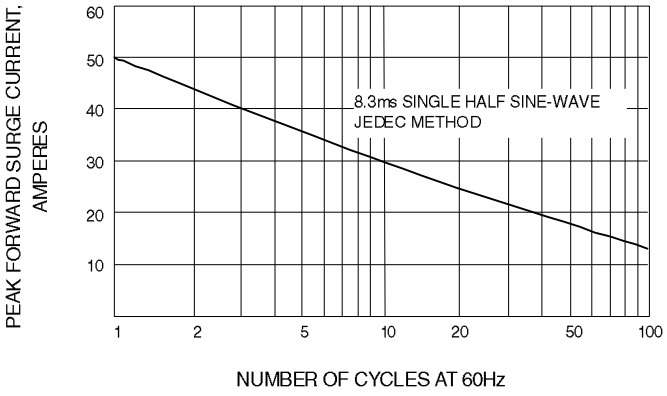


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT