



SL32 THRU SL310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 3.0 Amperes

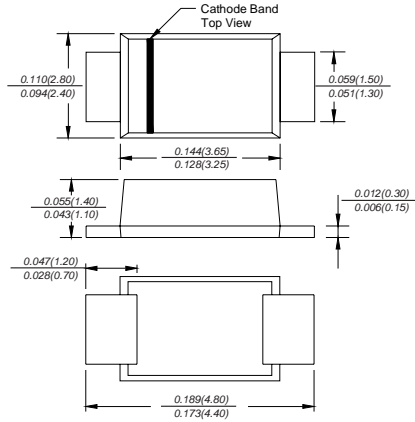
FEATURES

The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
 For surface mounted applications
 Metal silicon junction, majority carrier conduction
 Low power loss, high efficiency
 Built-in strain relief, ideal for automated placement
 High forward surge current capability
 High temperature soldering guaranteed:
 260°C/10 seconds at terminals

MECHANICAL DATA

Case: SMAF molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0014 ounce, 0.038 grams

SMAF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

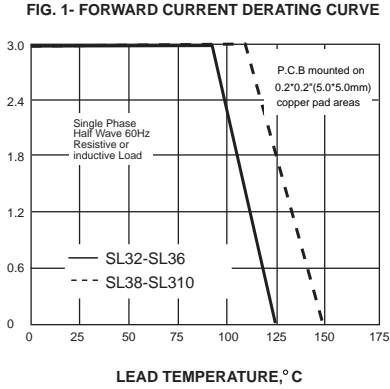
	SYMBOLS	SL32	SL33	SL34	SL35	SL36	SL38	SL310	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V	
Maximum average forward rectified current at T_L (see fig. 1)	$I_{(AV)}$	3.0							A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80.0							A	
Maximum instantaneous forward voltage at 3.0A	V_F	0.45			0.55		0.7		V	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5					0.2		mA	
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		10.0					5.0			
Typical junction capacitance (NOTE 1)	C_J	500			300				pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0								°C/W
Operating junction temperature range	T_J	-55 to +125						-55 to +150		°C
Storage temperature range	T_{STG}	-55 to +150								°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

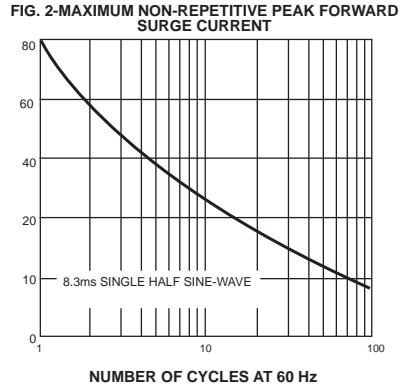


RATINGS AND CHARACTERISTIC CURVES SL32 THRU SL310

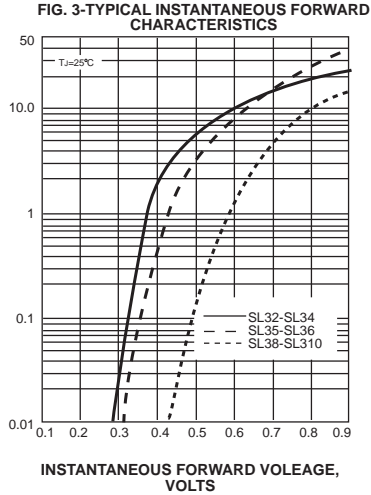
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



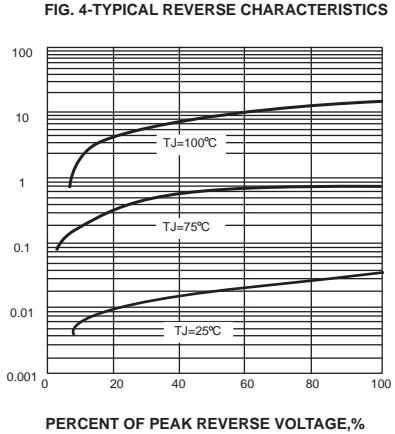
PEAK FORWARD SURGE CURRENT, AMPERES



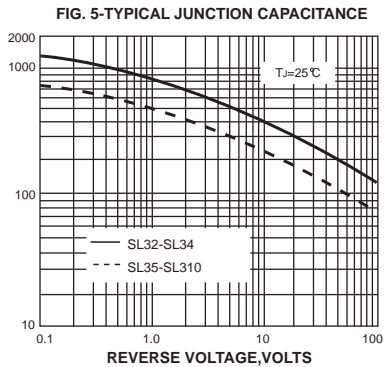
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

