



SS32L THRU SS320L

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

FEATURES

- High current capability
- High surge current capability
- Low forward voltage drop
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and porlarlity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-214AC

Epoxy: UL 94V-O rate flame retardant

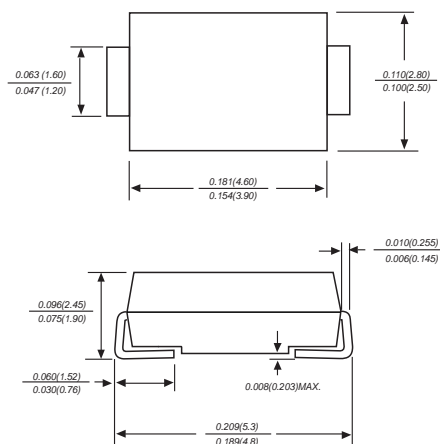
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.003ounce, 0.093gram

DO-214AC/SMA



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, derate current by 20%.

	Symbols	SS32L	SS34L	SS36L	SS38L	SS310L	SS315L	SS320L	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length	$I_{(AV)}$	3.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80							Amp
Maximum Forward Voltage at 3.0A DC and 25 °C	V_F	0.45	0.60	0.70		0.80		Volts	
Maximum Reverse Current at $T_A=25$ °C at Rated DC Blocking Voltage $T_A=100$ °C	I_R	0.5							mAmp
Typical Junction Capacitance (Note 1)	C_J	500			380			pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	15			10			/W	
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150				
Storage Temperature Range	T_{stg}	-55 to +150							

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted



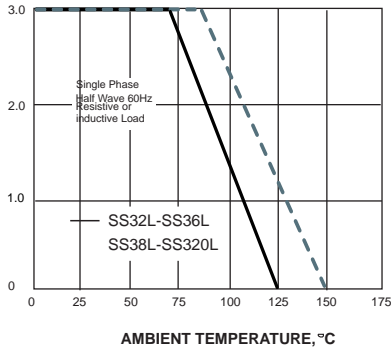
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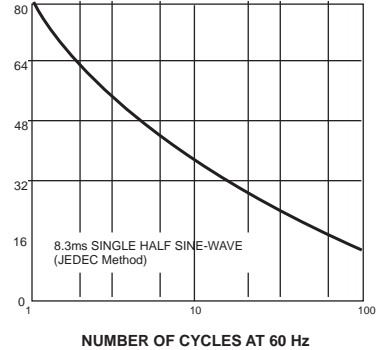
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



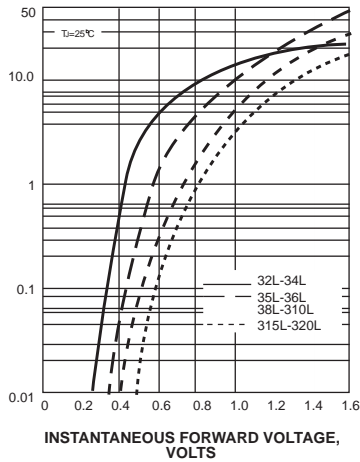
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



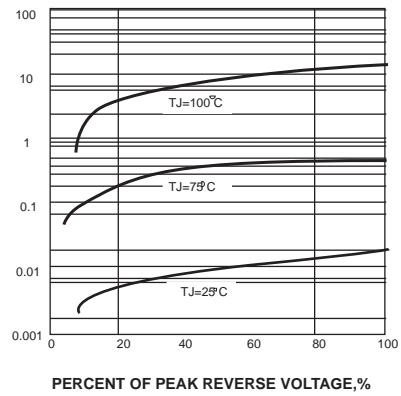
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



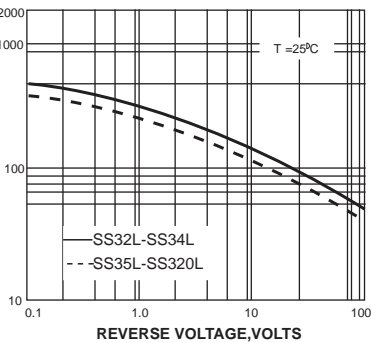
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



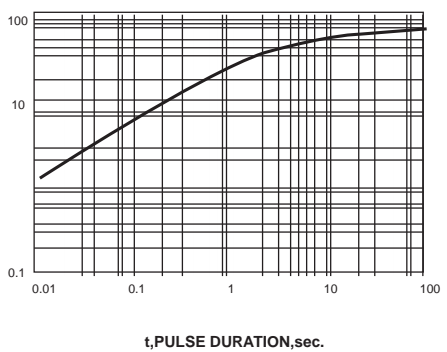
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE





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Packaging

Tape	Symbol	Dimension (mm)
	W	12.00±0.20
	P0	4.00±0.10
	P1	4.00±0.10
	P2	2.00±0.10
	D0	Φ1.5±0.10
	D1	Φ1.5±0.10
	E	1.75±0.10
	F	5.50±0.05
	A0	2.79±0.10
	B0	5.33±0.10
	K0	2.55±0.15
	T	0.25±0.05
	D2	Φ178.0±2.0
	D3	Φ50.0Min.
	D4	Φ13.0±0.5
W1	16.0±2.0	
Quantity: 2000PCS		
7" Reel	D2	Φ178.0±2.0
	D3	Φ50.0Min.
	D4	Φ13.0±0.5
	W1	16.0±2.0
	Quantity: 2000PCS	
11" Reel	D5	Φ280.0±2.0
	D6	Φ13.5±0.5
	H	2.5±1.0
	W2	16.0±2.0
	Quantity: 5000PCS	