



SS52L THRU SS520L

LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

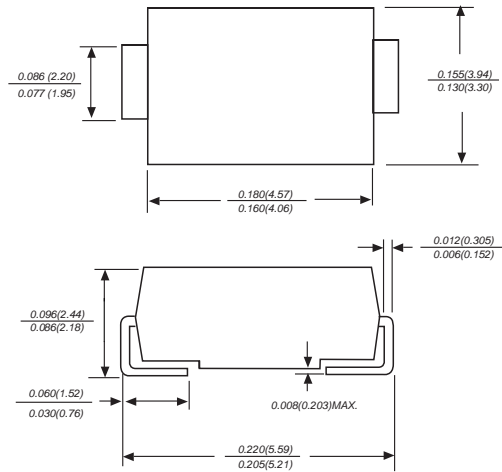
FEATURES

- 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-214AA
 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: 0.007ounce, 0.21gram

DO-124AA/SMB



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	SS52L	SS54L	SS56L	SS58L	SS510L	SS515L	SS520L	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	$I_{(AV)}$	5.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120							Amp
Maximum Forward Voltage at 5.0A DC and 25 °C	V_F	0.45	0.55	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 +150			-55 to +175				
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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RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

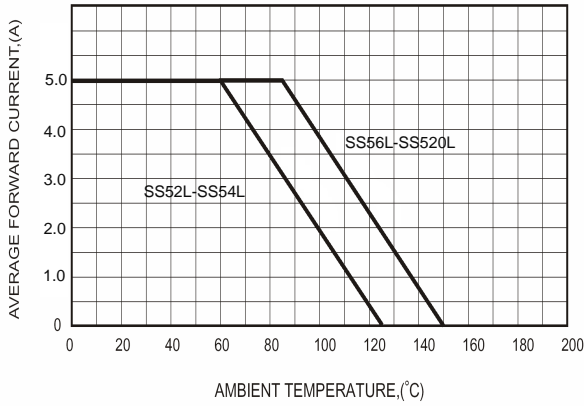


FIG.2-TYPICAL FORWARD CHARACTERISTICS

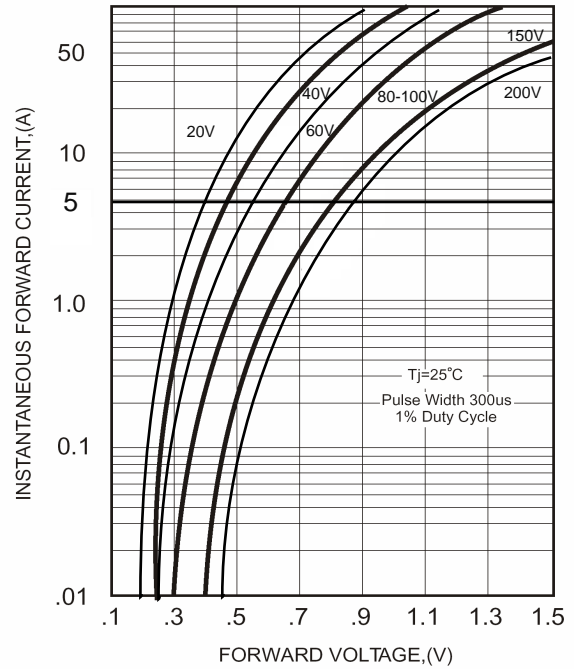


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

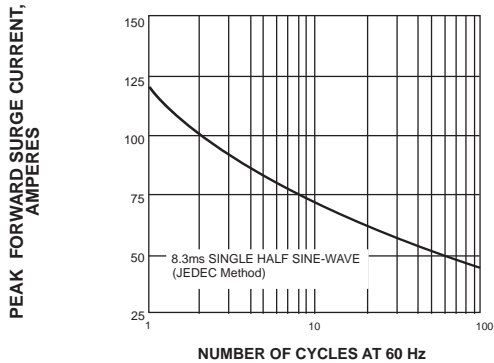


FIG.4-TYPICAL JUNCTION CAPACITANCE

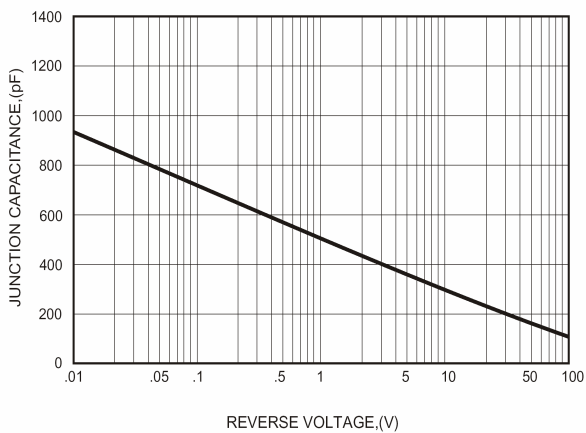
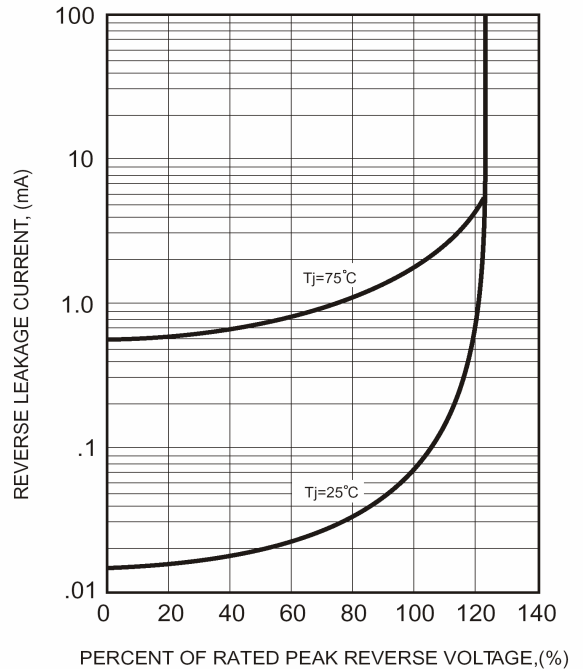


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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Packaging

Tape	Symbol	Dimension (mm)
	W	12.00±0.20
	P0	4.00±0.10
	P1	8.00±0.10
	P2	2.00±0.10
	D0	Φ1.55±0.10
	D1	Φ1.5±0.10
	E	1.75±0.10
	F	5.50±0.10
	A0	3.86±0.15
	B0	5.65±0.10
	K0	2.75±0.15
	T	0.25±0.05
	7" Reel	D2
	D3	Φ50.0Min.
	D4	Φ13.0±0.5
	W1	16.0±2.0
	Quantity: 500PCS	
13" Reel	D5	Φ330.0±2.0
	D6	Φ13.5±0.5
	H	2.5±1.0
	W2	16.0±2.0
	Quantity: 3000PCS	