

# SS54L THRU SS520L

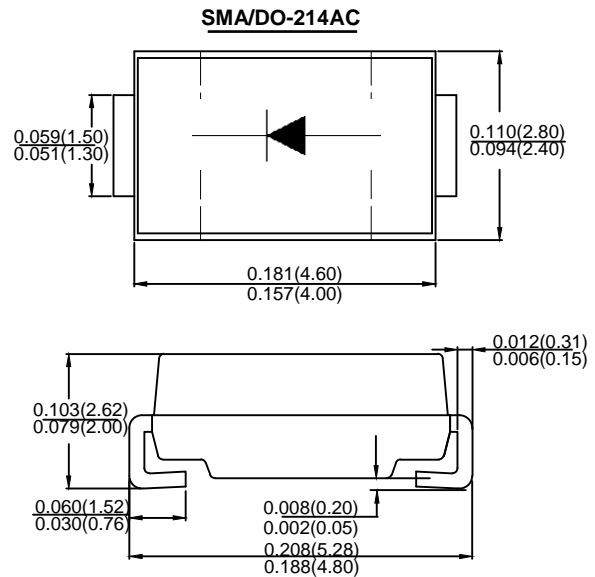
## 5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### Features

- Schottky Brier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 110A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 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	SYMBOL	SS 54L	SS 545L	SS 55L	SS 56L	SS 58L	SS 510L	SS 515L	SS 520L	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	31	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	60	60	80	100	150	200	V
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_F(AV)$	5.0								A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	110								A
Rating for fusing ( $t < 8.3ms$ )	$I^2 t$	50.22								$A^2 s$
Forward Voltage @ $I_F = 5.0A$ (Note 1)	$V_{FM}$	0.45		0.5	0.6		0.85		V	
Peak Reverse Current @ $T_A = 25^\circ C$	$I_R$	0.2				0.1				mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10				5				
Typical Junction Capacitance	$C_J$	28								pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	88								$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150								$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ C$

Note: 1. Pulse Test with PW=300usec, 1% Duty Cycle.

2. Mounted on P.C. Board with 5.0 mm<sup>2</sup> (0.13mm thick) copper pad areas.

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Fig. 1 Forward Current Derating Curve

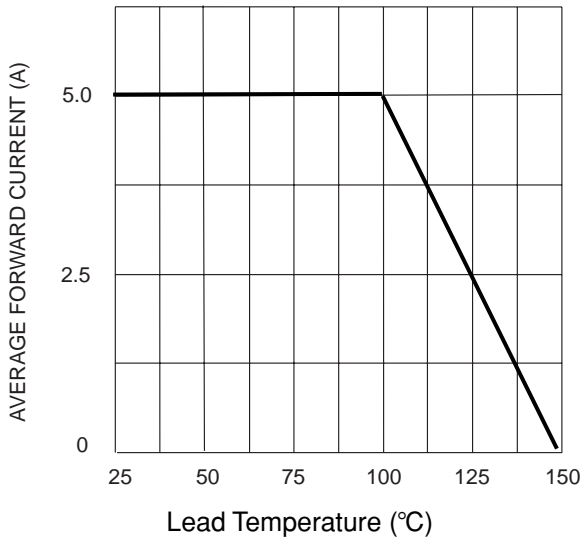


Fig. 2 Typ. Forward Characteristics

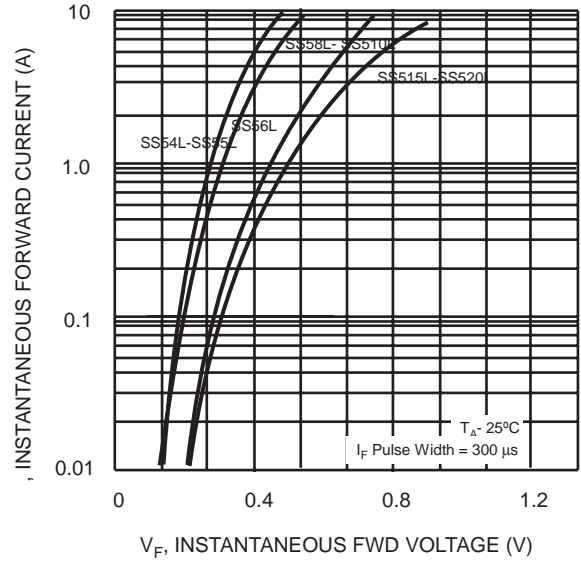


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

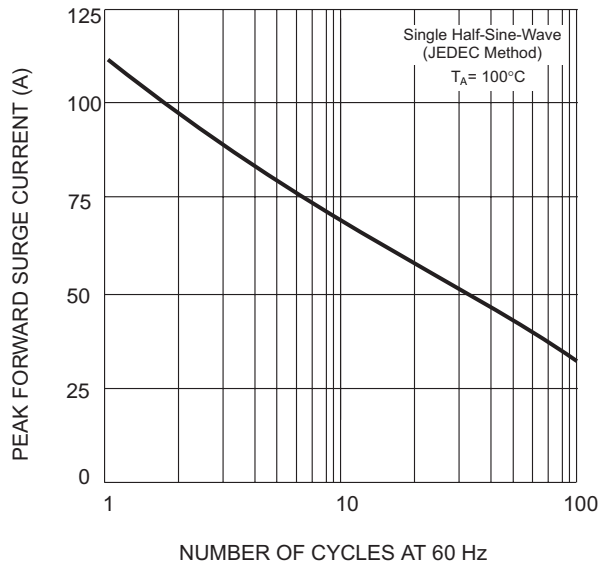
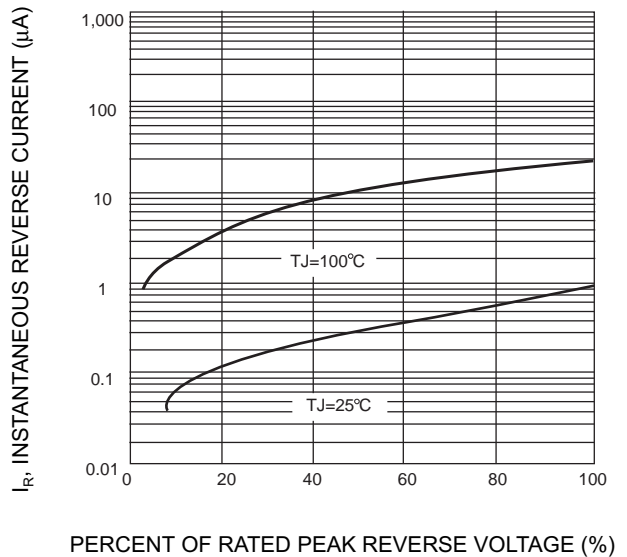
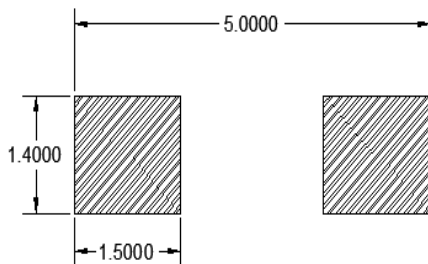


Fig. 4 T typical Reverse Characteristics (per element)



## SMA PAD LAYOUT



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