



# SS52U THRU SS525U

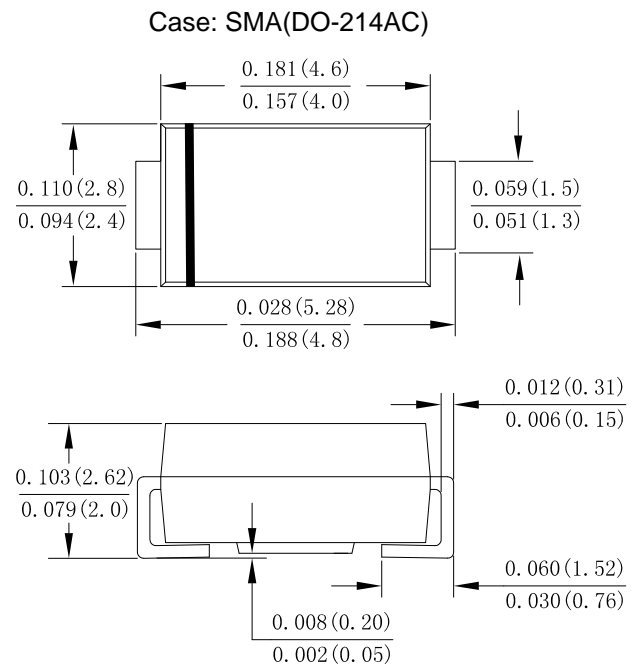
5.0 AMP Surface Mount Schottky Barrier Rectifier

## Features

- Schottky Barrier 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 52U	SS 53U	SS 54U	SS 545U	SS 55U	SS 56U	SS 58U	SS 510U	SS 515U	SS 520U	SS 525U	Unit	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	80	100	150	200	250	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	31	35	42	56	70	105	140	175	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	45	50	60	80	100	150	200	250	V	
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	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 ( $t < 8.3\text{ms}$ )	$I^2 t$	50.22											$\text{A}^2 \text{s}$	
Forward Voltage @ $I_F = 5.0\text{A}$	$V_{FM}$	0.53			0.67		0.82		0.90		0.92		V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	$I_R$	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		10						5						
Typical Junction Capacitance (Note 1)	$C_J$	200						110						pF
Typical Thermal Resistance	$R_{\theta JA}$	110											$^\circ\text{C}/\text{W}$	
	$R_{\theta JC}$	25												
	$R_{\theta JL}$	17												
Operating Temperature Range	$T_J$	-55 to +150											$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-55 to +150											$^\circ\text{C}$	

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



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Fig. 1 Forward Current Derating Curve

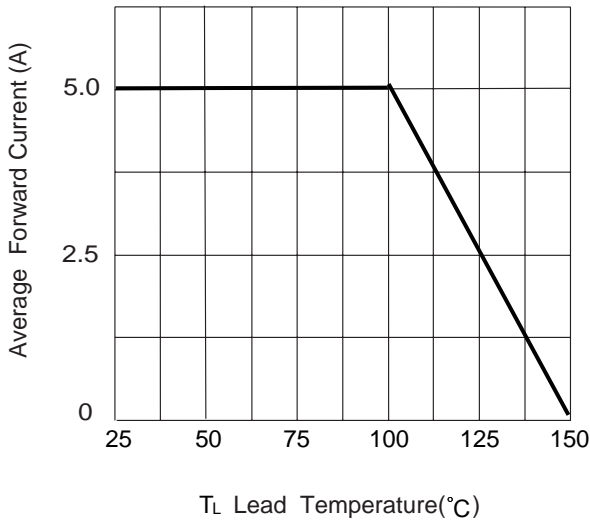


Fig. 2 Typ. Forward Characteristics

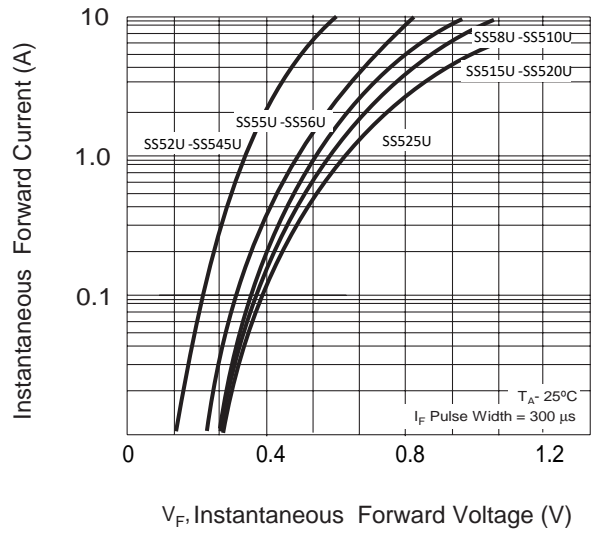


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

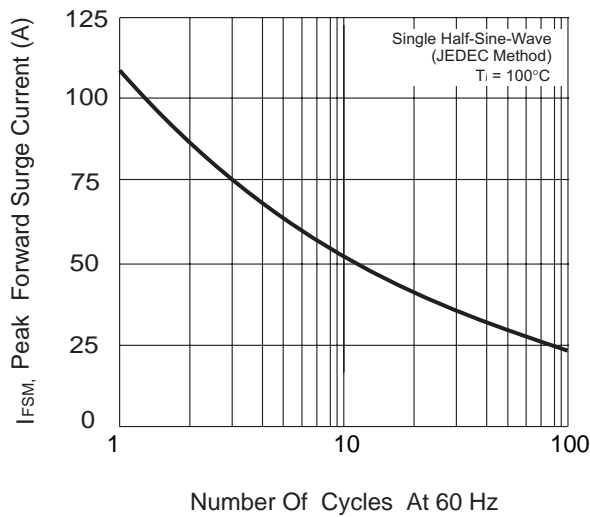


Fig.4 Typical Reverse Characteristics

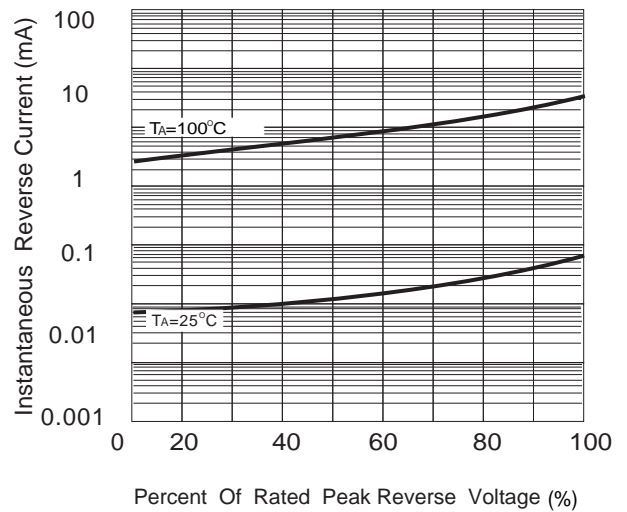
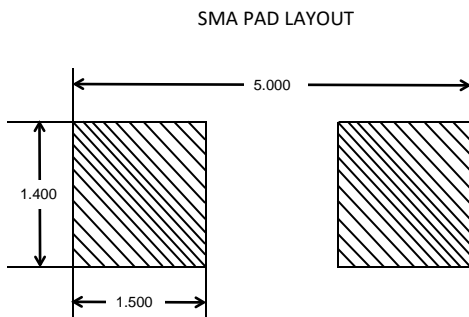


Fig.5 Mounting PAD Layout





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