



# SS12U THRU SS120U

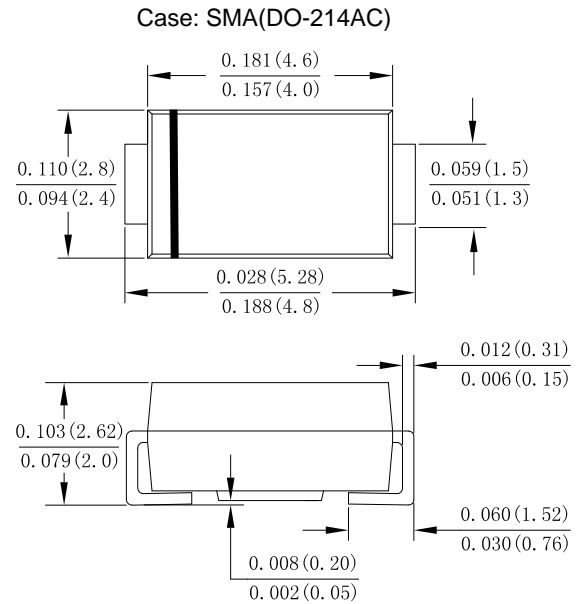
1.0AMP Surface Mount Schottky Barrier Rectifier

## Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 35A 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



## 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 12U	SS 13U	SS 14U	SS 145U	SS 15U	SS 16U	SS 18U	SS 110U	SS 115U	SS 120U	Unit	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	80	100	150	200	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	31	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	45	50	60	80	100	150	200	V	
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	1.0										A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	35										A	
Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	5.08										$\text{A}^2 \text{s}$	
Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$	0.50			0.67		0.82		0.9			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)	$C_J$	50						35					pF
Typical Thermal Resistance per leg	$R_{\theta JL}$	110										$^\circ\text{C}/\text{W}$	
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

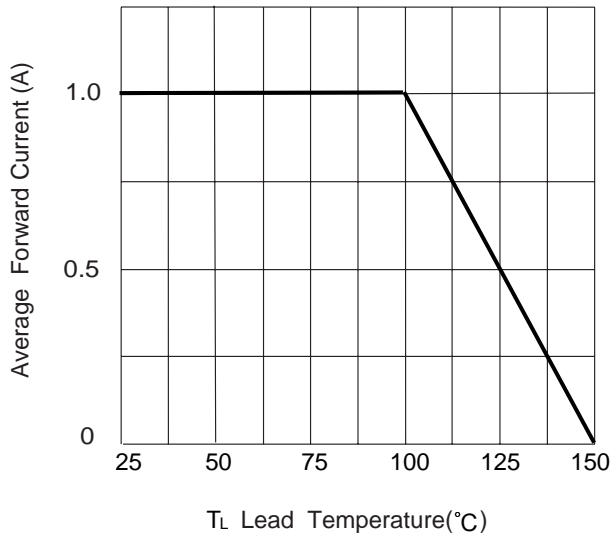


Fig. 2 Typ. Forward Characteristics

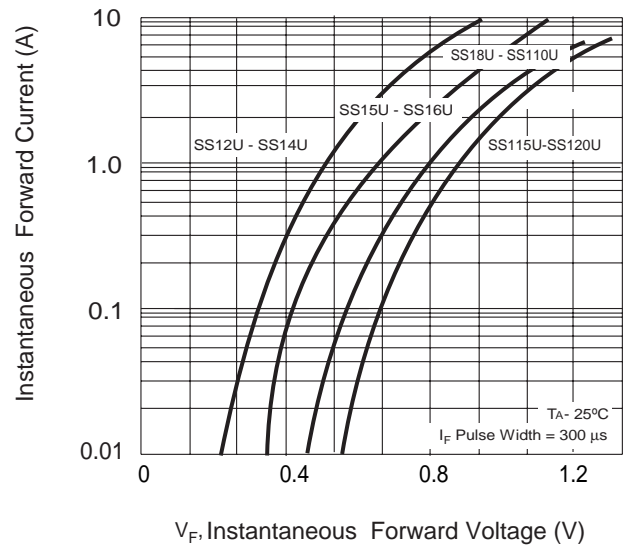


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

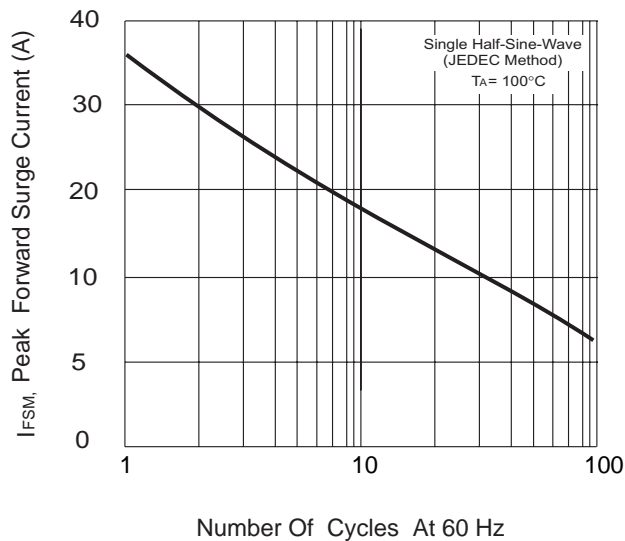


Fig.4 Typical Reverse Characteristics (per element)

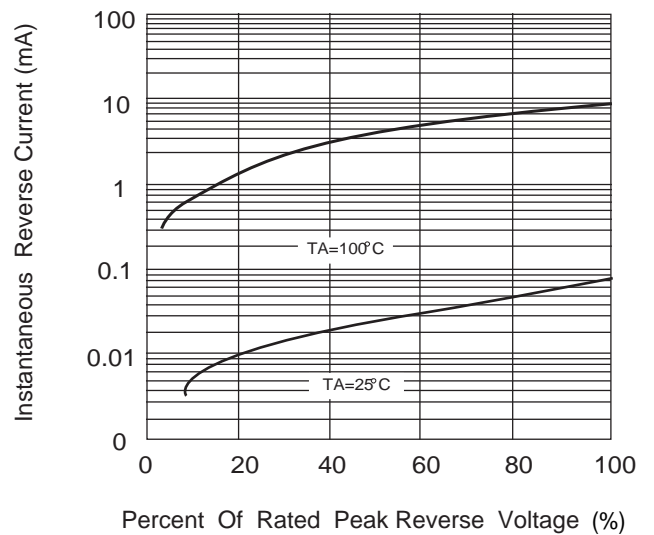
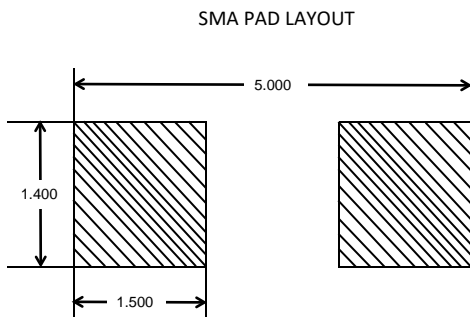


Fig.5 Mounting PAD Layout





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