



SS12U THRU SS120U

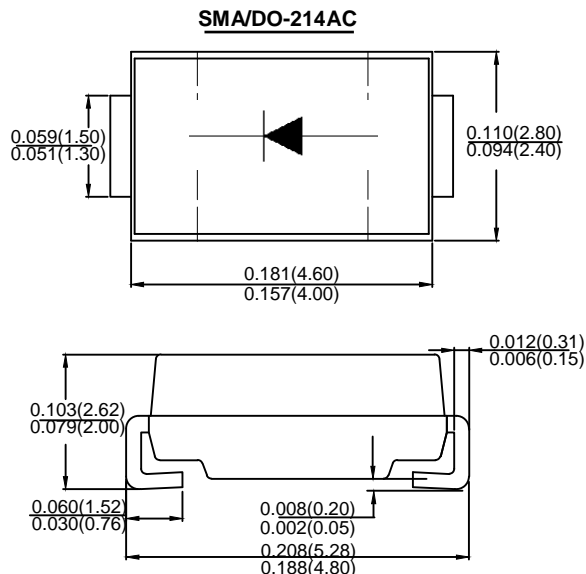
1.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- Schottky Barrier 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



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 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 @ $T_L = 100^\circ C$	$I_F(AV)$	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 ($t < 8.3ms$)	$I^2 t$	5.08										A ² s
Forward Voltage @ $I_F = 1.0A$	V_{FM}	0.50			0.67			0.82		0.9		V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	0.1						0.05				mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10						5				
Typical Junction Capacitance (Note 1)	C_J	50						35				pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JL}$	75										°C/W
Operating Temperature Range	T_J	-55 to +150										°C
Storage Temperature Range	T_{STG}	-55 to +150										°C

- Note:
1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
 2. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.1"×0.15" copper pad.



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Fig. 1 Forward Current Derating Curve

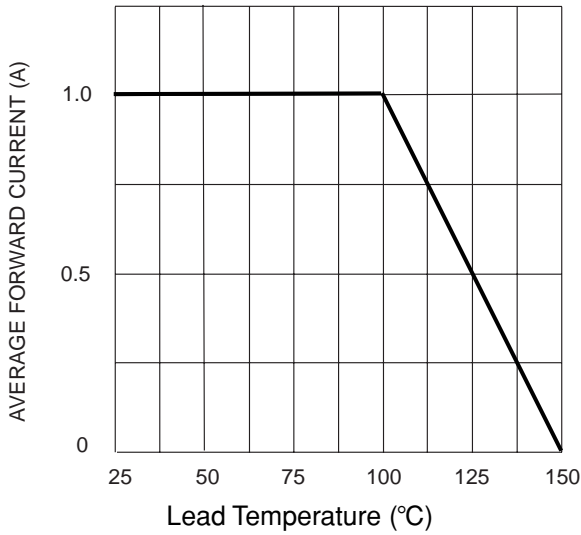


Fig. 2 Typ. Forward Characteristics

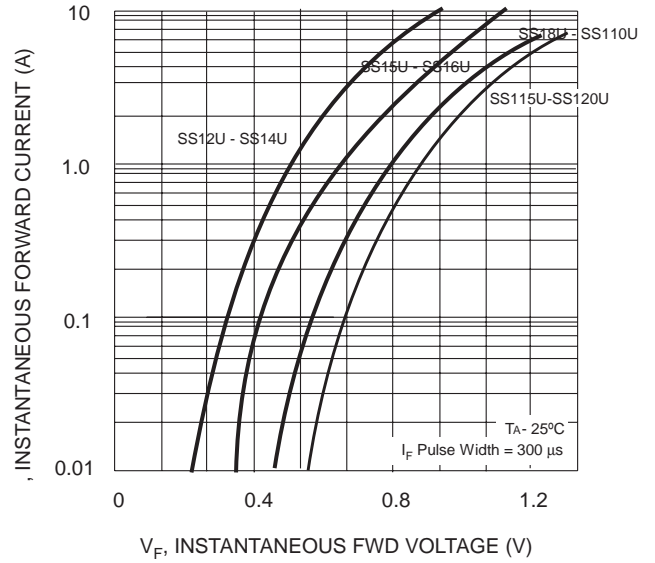


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

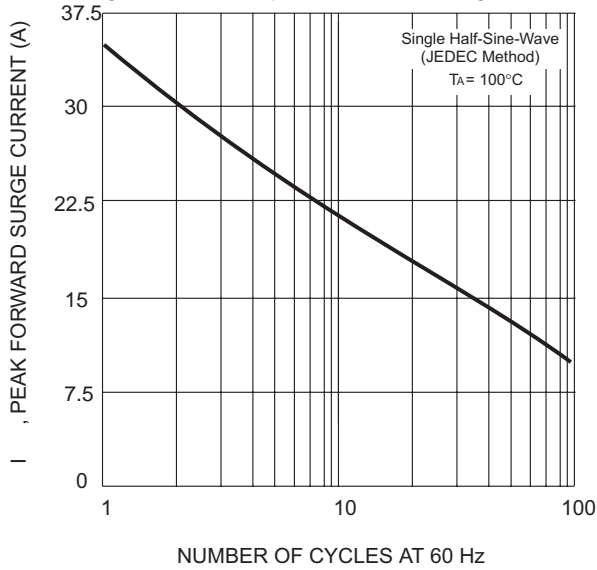
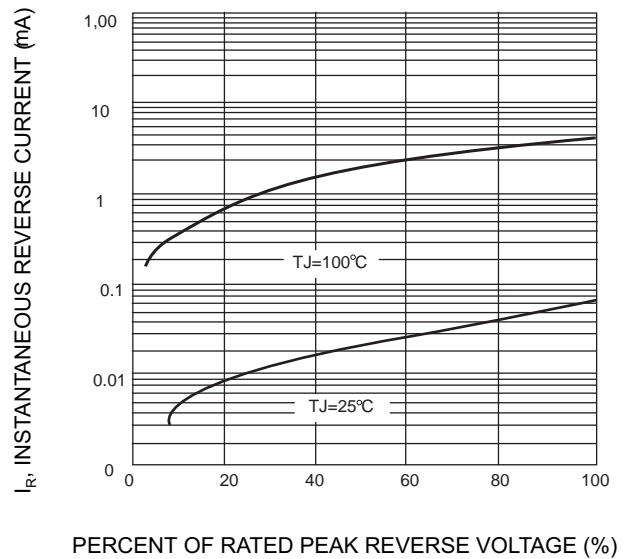
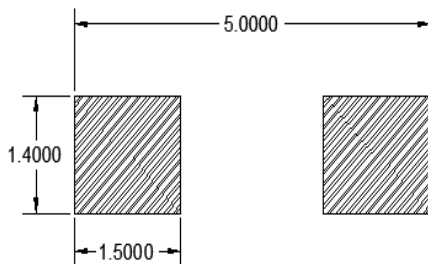


Fig. 4 Typical Reverse Characteristics (per element)



SMA PAD LAYOUT





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