

SuperSchottky – 1A, 20~200V Schottky barrier rectifiers



1. Features

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250 C/10 seconds at terminals

2. Mechanical Data

- Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbol marking on body
- Mounting Position: Any
- Weight: 0.0023 ounce, 0.07 grams

3. Marking and Circuit

Marking	Circuit
	

4. Specification

Absolute Maximum Rating & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load.

Parameters	Symbol	SS12A	SS14A	SS145A	SS16A	SS18A	SS110A	SS115A	SS120A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	45	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	31.5	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	45	60	80	100	150	200	V
Maximum average forward rectified current at $T_L=100^{\circ}C$	$I_{F(AV)}$	1.0								A
Non-Repetitive Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30								A
Maximum instantaneous forward voltage at 1.0A	V_F	0.55		0.7		0.85		0.95		V
Maximum DC reverse current at rated	I_R	$T_J=25^{\circ}C$				$T_J=125^{\circ}C$				mA
DC blocking voltage		0.5				0.05				
Typical thermal resistance	$R_{\theta JA}$	50								$^{\circ}C/W$
Operating junction temperature range	T_J	-55 TO +125				-55 TO +150				$^{\circ}C$
Storage temperature range	T_{STG}	-55 TO +150								$^{\circ}C$

5. Typical Characteristic

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

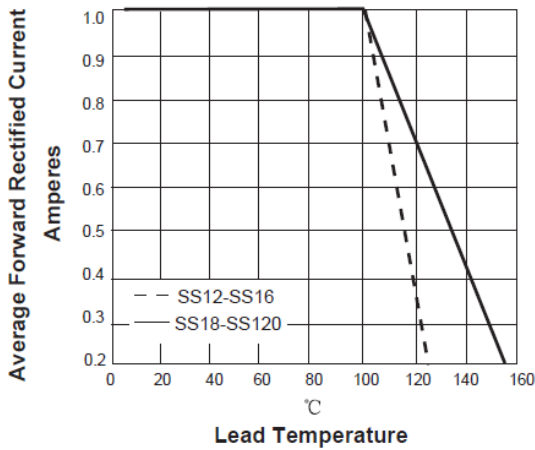


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

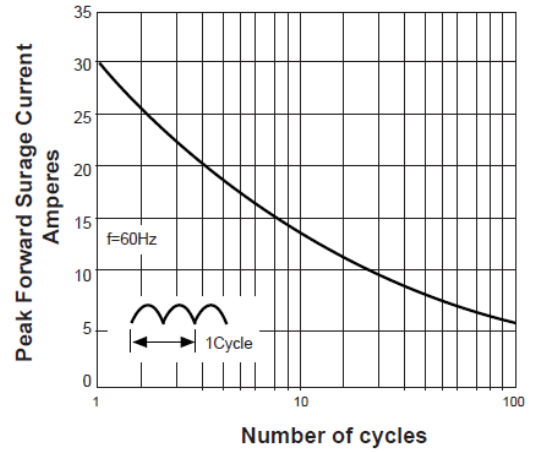


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

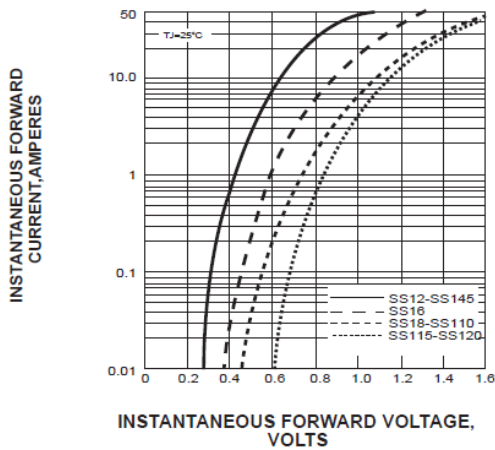
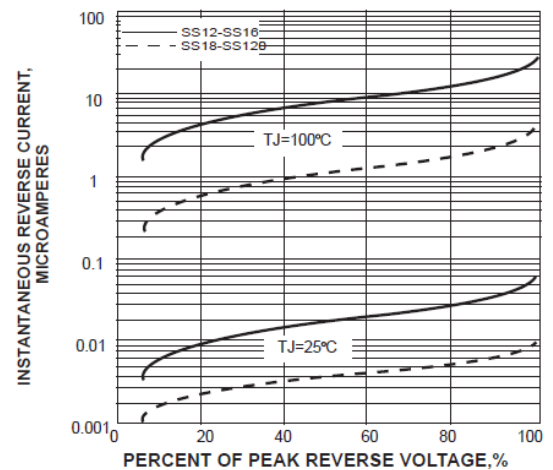
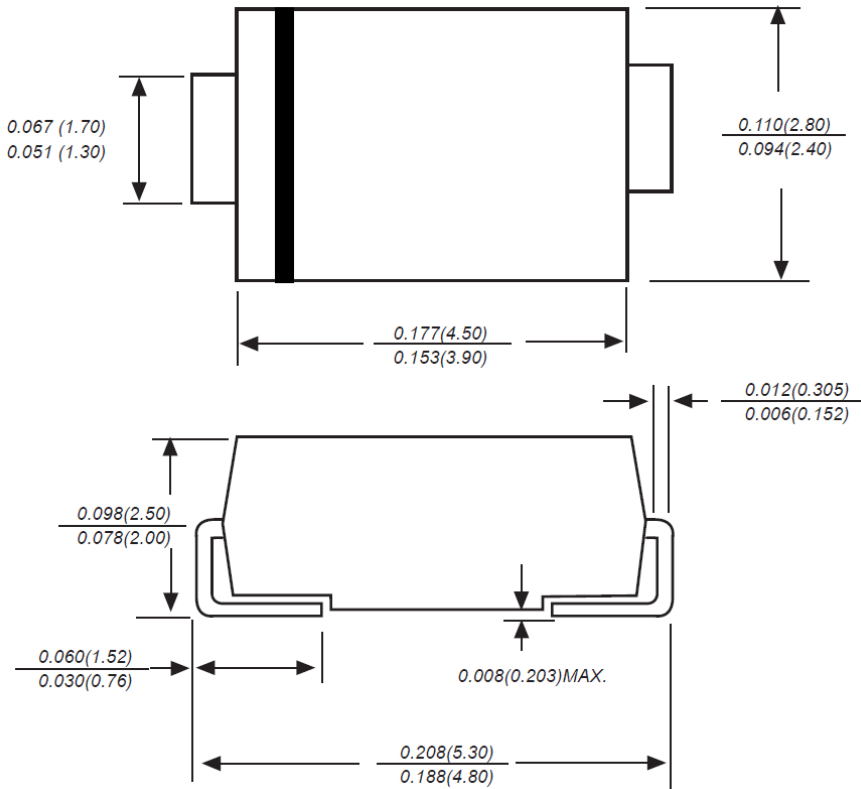


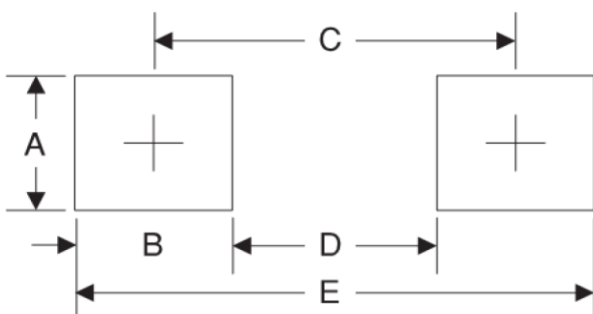
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



6. Dimension (DO-214AC/SMA)



Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.41	0.095
E	5.45	0.215

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