

**SS12 THRU SS120**  
**SURFACE MOUNT**



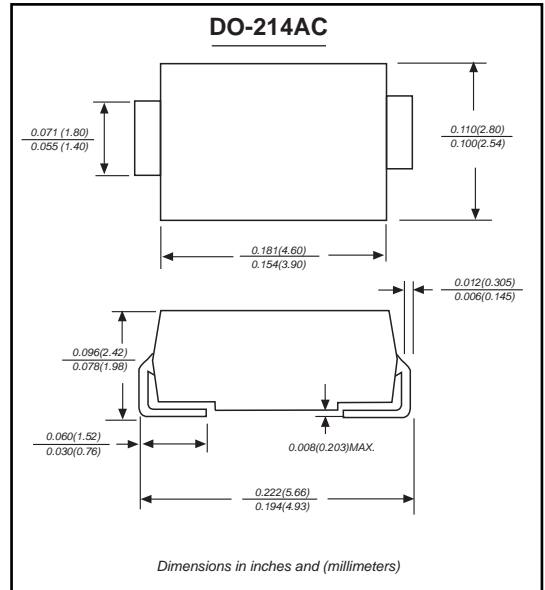
**SCHOTTKY BARRIER RECTIFIER**

**FEATURES**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

**MECHANICAL DATA**

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 grams



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

	SYMBOLS	SS12	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at $T_L$ see figure 1 $T_L=105^\circ\text{C}$	$I_{(AV)}$	1.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30								Amps
Maximum Instantaneous Forward Voltage @ 1.0A(Note1)	$V_F$	0.55		0.7		0.85		0.90	0.95	Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ\text{C}$	0.5								mA
	$T_A = 100^\circ\text{C}$	20.0		10.0						
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55								°C/W
	$R_{\theta JL}$	12								
Operating Junction Temperature	$T_J$	(-55 to +125)								°C
Storage Temperature Range	$T_{STG}$	(-55 to +150)								°C

**Notes:**

1. Pulse test: 300 μs pulse width, 1% duty cycle
2. PCB mounted with 0.2×0.2" (5.0 × 5.0mm) copper pads

**RATINGS AND CHARACTERISTIC CURVES**

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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

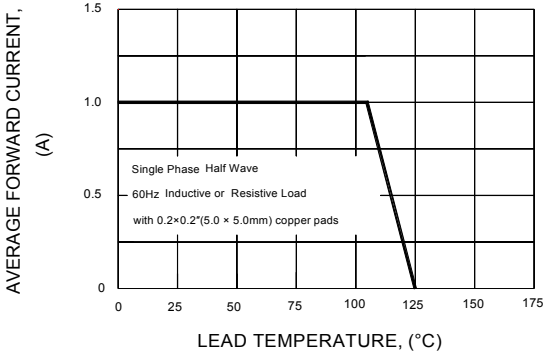


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

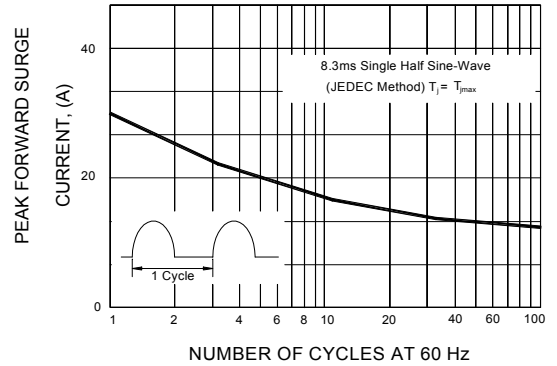


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

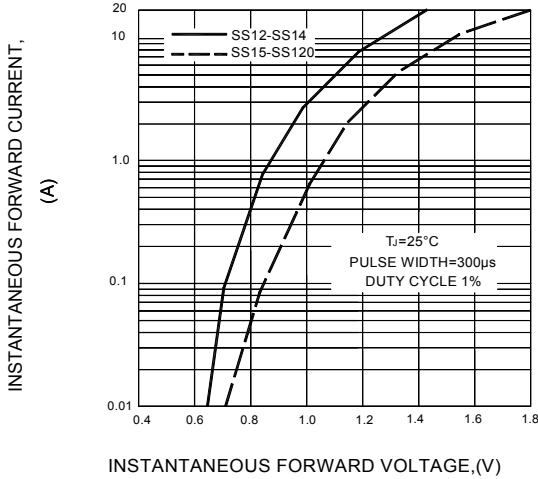


FIG.4-TYPICAL REVERSE CHARACTERISTICS

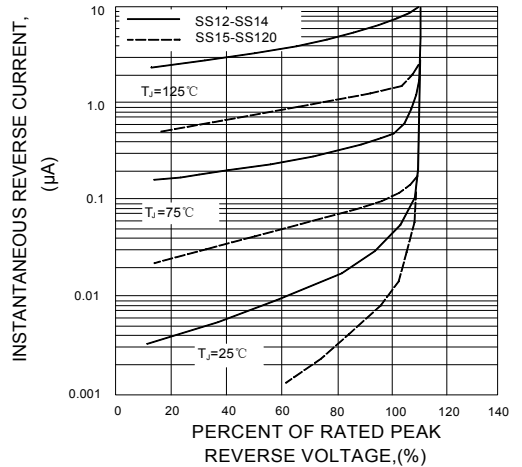


FIG.5-TYPICAL JUNCTION CAPACITANCE

