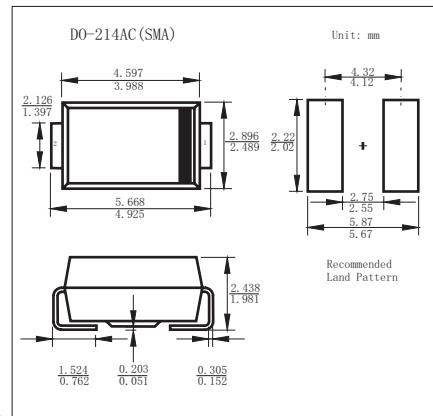


## Schottky Diodes

### 1N5817 ~ 1N5819

#### ■ Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	1N5817	1N5818	1N5819	Unit
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
RMS Reverse Voltage	V <sub>R</sub> (RMS)	14	21	28	
DC Blocking Voltage	V <sub>R</sub>	20	30	40	
Average Rectified Rectified Current	I <sub>FAV</sub>	1			A
Peak Forward Surge Current @=8.3ms	I <sub>FSM</sub>	40			
Thermal Resistance Junction to Ambient (Note.1)	R <sub>θJA</sub>	88			°C/W
Thermal Resistance Junction to Lead (Note.1)	R <sub>θJL</sub>	28			
Voltage Rate of Change (rated V <sub>R</sub> )	dV/dt	10000			V/us
Junction Temperature	T <sub>J</sub>	-60 to 125			°C
Storage Temperature range	T <sub>stg</sub>	-65 to 150			

Note.1: P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0 mm) copper pad areas

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage (Note.1)	V <sub>F</sub>	I <sub>F</sub> = 1 A			0.5	V
Reverse voltage leakage current (Note.1)	I <sub>R</sub>	T <sub>a</sub> = 25°C			0.2	mA
		T <sub>a</sub> = 100°C			6	

Note.1: Pulse test: 300 μs pulse width, 1 % duty cycle

#### ■ Marking

NO.	1N5817	1N5818	1N5819
Marking	SS12	SS13	SS14

## Schottky Diodes

### 1N5817 ~ 1N5819

#### ■ Typical Characteristics

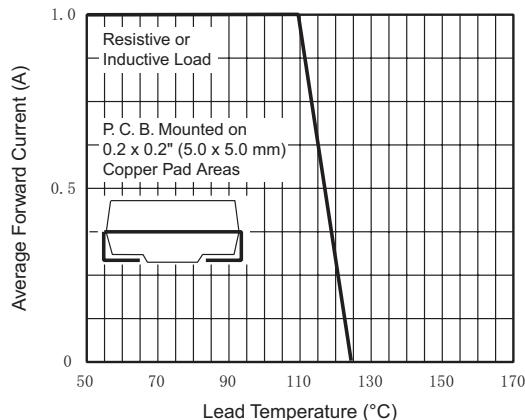


Figure 1. Forward Current Derating Curve

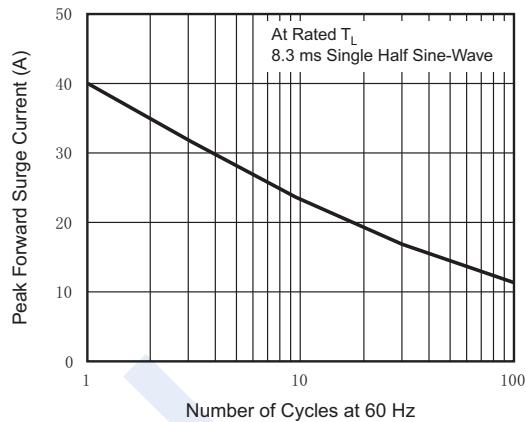


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

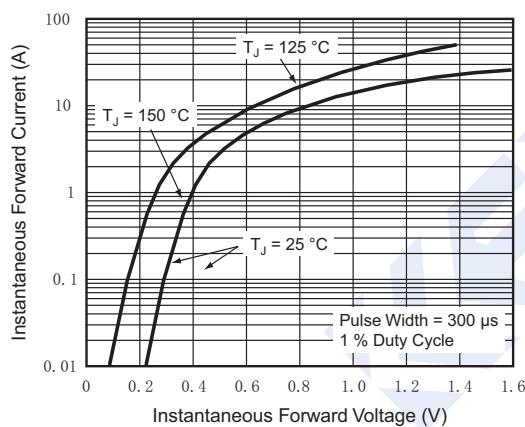


Figure 3. Typical Instantaneous Forward Characteristics

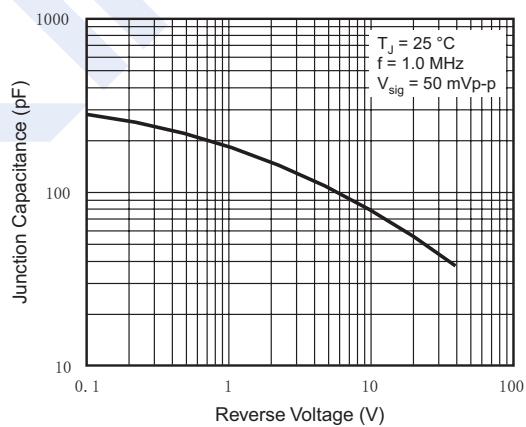


Figure 5. Typical Junction Capacitance

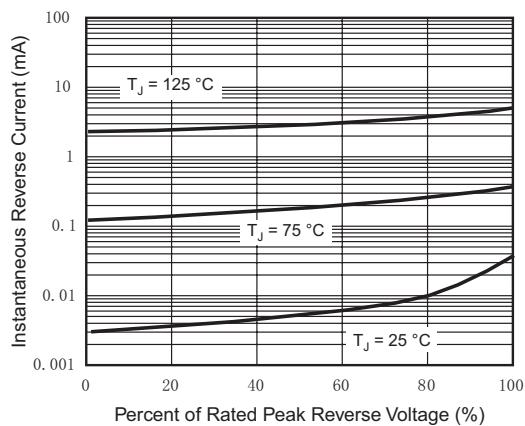


Figure 4. Typical Reverse Characteristics