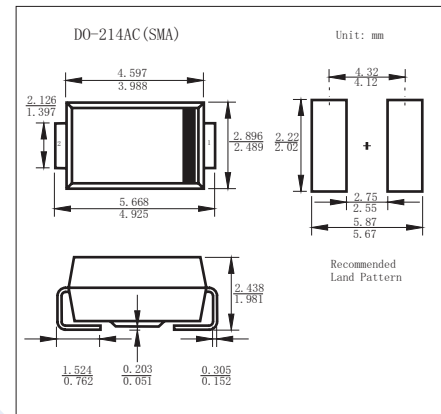


## Schottky Diodes

## 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  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	1N5817	1N5818	1N5819	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	
DC Blocking Voltage	$V_R$	20	30	40	
Average Rectified Current	$I_{FAV}$	1			A
Peak Forward Surge Current @=8.3ms	$I_{FSM}$	40			
Thermal Resistance Junction to Ambient (Note.1)	$R_{\theta JA}$	88			$^\circ\text{C}/\text{W}$
Thermal Resistance Junction to Lead (Note.1)	$R_{\theta JL}$	28			
Voltage Rate of Change (rated $V_R$ )	$dv/dt$	10000			V/us
Junction Temperature	$T_J$	-60 to 125			$^\circ\text{C}$
Storage Temperature range	$T_{stg}$	-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  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward voltage (Note.1)	$V_F$	$I_F = 1\text{ A}$			0.5	V
Reverse voltage leakage current(Note.1)	$I_R$	$T_a = 25^\circ\text{C}$			0.2	mA
		$T_a = 100^\circ\text{C}$			6	

Note.1: Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

## ■ Marking

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

# Schottky Diodes

## 1N5817 ~ 1N5819

### Typical Characteristics

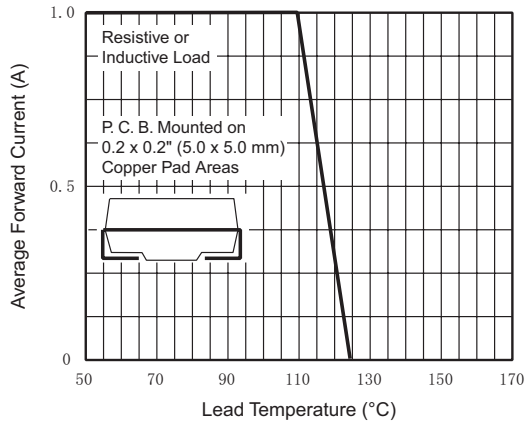


Figure 1. Forward Current Derating Curve

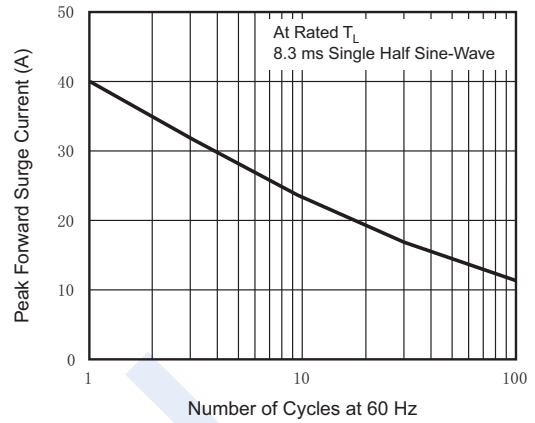


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

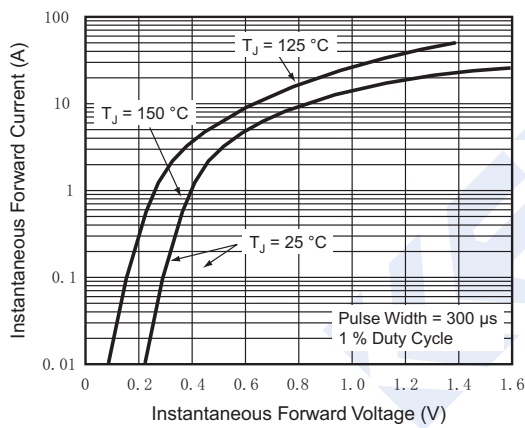


Figure 3. Typical Instantaneous Forward Characteristics

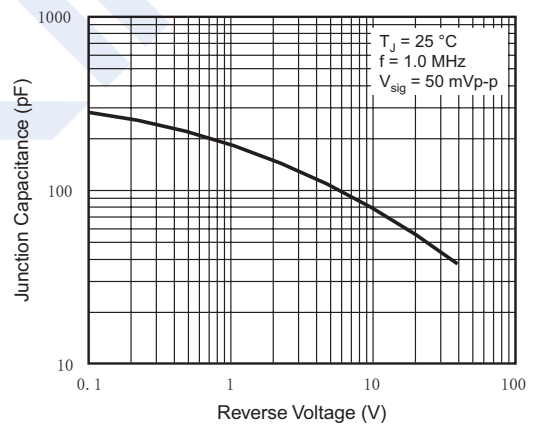


Figure 5. Typical Junction Capacitance

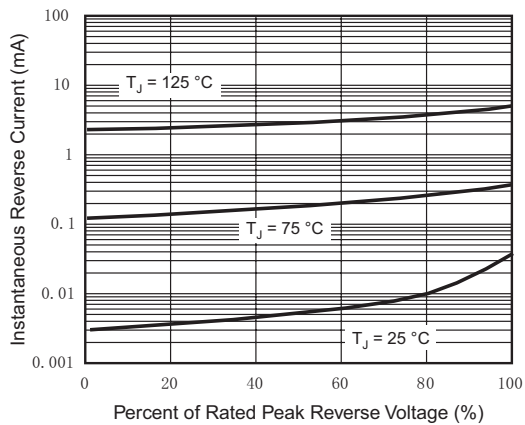


Figure 4. Typical Reverse Characteristics