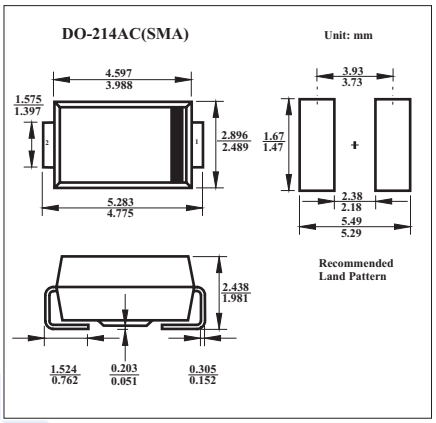
Schottky Barrier Rectifier Diodes

1N5817-1N5819



Features

- For Surface Mounted Applications
- Metal Silicon Junction, Majority Carrier Conduction
- Low Power Loss, High Efficiency
- High Forward Surge Current Capability

Maximum Ratings and Electrical Characteristics @ Ta = 25℃

Parameter	Symbol	Rating			Unit
		1N5817	1N5818	1N5819	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40			A
Maximum InstantaneousForward Voltage at 1.0A	V_F	0.45	0.55	0.55	V
Maximum DC Reverse Current T_A=25℃	I_R	0.5			mA
At Rated DC Blocking Voltage T_A=100℃		6.0			
Typical Junction Capacitance *1	C_J	110			pF
Typical Thermal Resistance *2	$R_{\theta JA}$	88.0			℃/W
Operating Runction Temperature Range	T_J	-65 to +125			℃
Storage Temperature Range	T_{STG}	-65 to +150			℃

*1 Measured at 1Mz and applied reverse voltage of 4.0V D.C.

*2 P.C.B mounted with 0.2X0.2"(5.0x5.0mm)copper pad areas

Marking

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

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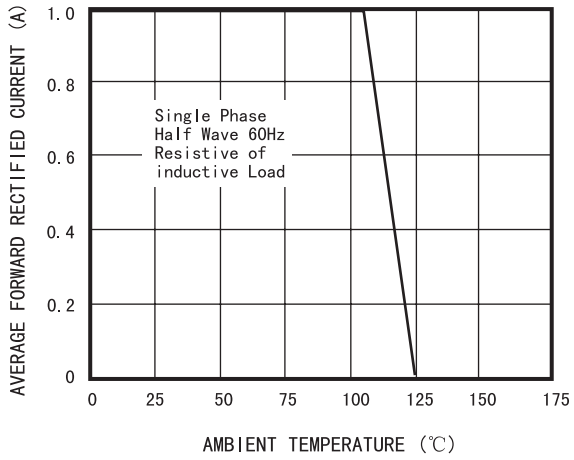
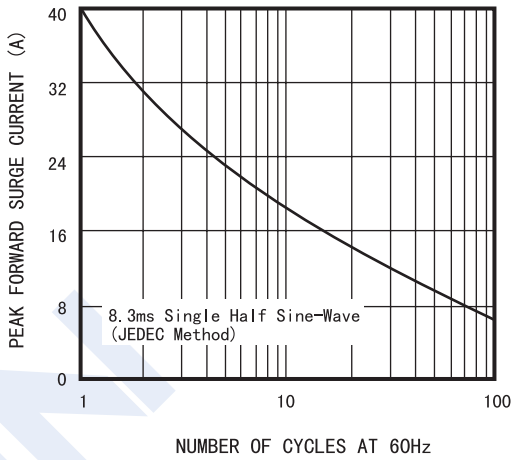
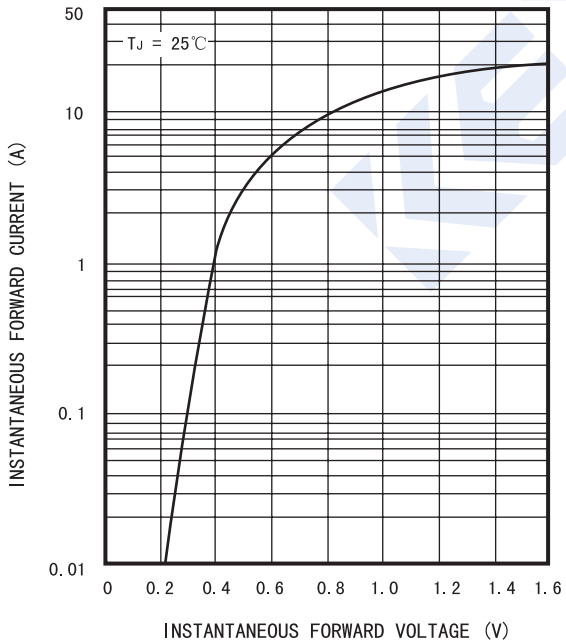
■ Electrical Characteristics Curves



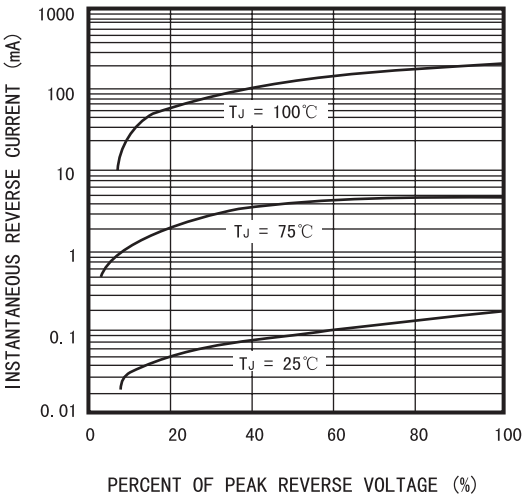
Forward Current Derating Curve



2-Maximum Non-Repetitive Peak Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics

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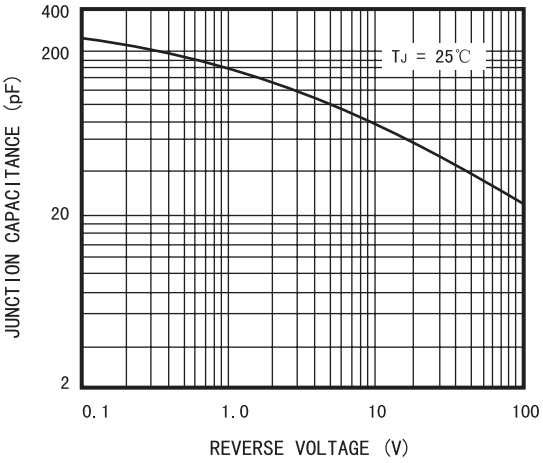
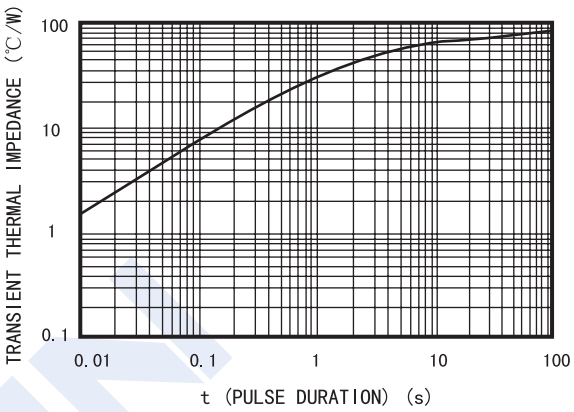


Typical Junction Capacitance



Typical Transient Thermal Impedance