



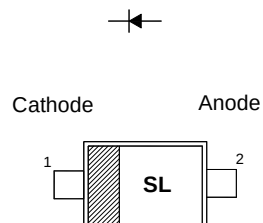
1N5817WS~1N5819WS

1 A Surface Mount Schottky Barrier Diode

Marking Code: 1N5817WS SJ

1N5818WS SK

1N5819WS SL



Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	1N5817WS 20	V
		1N5818WS 30	
		1N5819WS 40	
Average Forward Rectified Current	$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current ($t = 8.3\text{ ms}$)	I_{FSM}	9	A
Power Dissipation	P_{tot}	450	mW
Operating Temperature Range	T_j	- 55 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	1N5817WS 20	-	V
		1N5818WS 30	-	
		1N5819WS 40	-	
Forward Voltage at $I_F = 1\text{ A}$	V_F	1N5817WS -	0.45	V
		1N5818WS -	0.55	
		1N5819WS -	0.6	
at $I_F = 3\text{ A}$	V_F	1N5817WS -	0.75	V
		1N5818WS -	0.875	
		1N5819WS -	0.9	
Reverse Voltage Leakage Current at $V_R = 20\text{ V}$	I_R	1N5817WS -	1	mA
at $V_R = 30\text{ V}$		1N5818WS -	1	
at $V_R = 40\text{ V}$		1N5819WS -	1	
Total Capacitance at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	120	pF



Fig. 1 - Forward Current Derating Curve

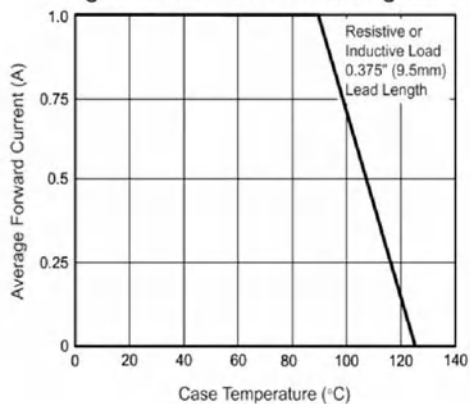


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

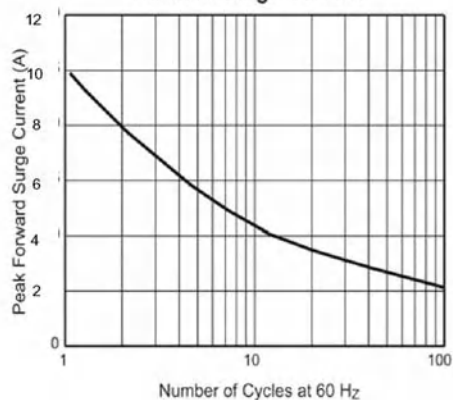


Fig. 3 - Typical Instantaneous Forward Characteristics

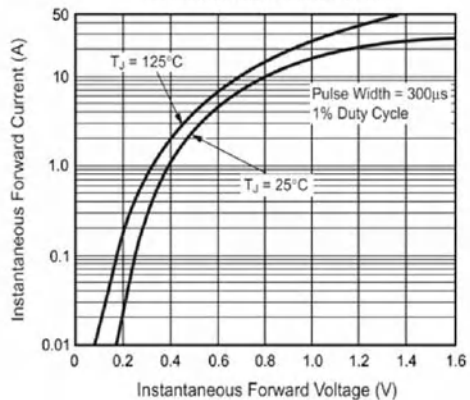


Fig. 4 - Typical Reverse Characteristics

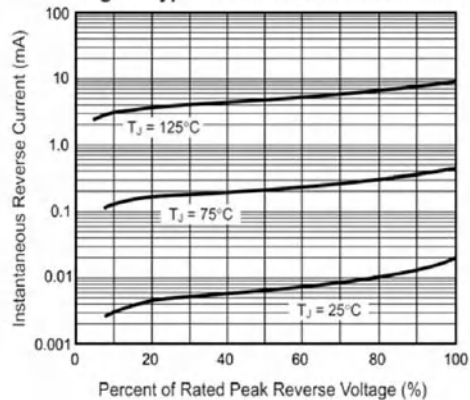


Fig. 5 - Typical Junction Capacitance

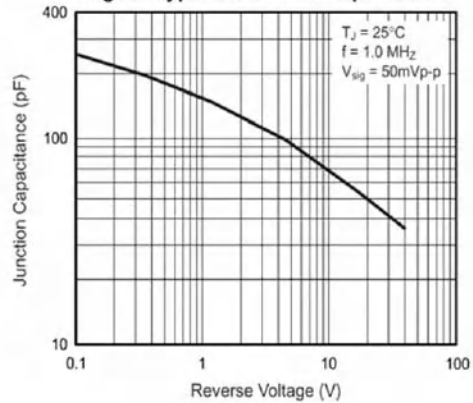
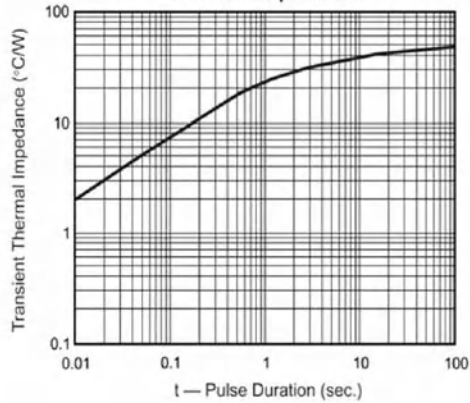


Fig. 6 - Typical Transient Thermal Impedance





PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

