

1N5817W-1N5819W

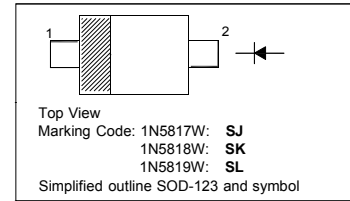
1A Surface Mount Schottky Barrier Diode

Features

For use in low voltage, high frequency inverters
 Free wheeling, and polarity protection applications.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	20 30 40	V
Average Forward Rectified Current	$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current (8.3 ms Single Half Sine-Wave)	I_{FSM}	25	A
Power Dissipation	P_{tot}	500	mW
Operating Temperature Range	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

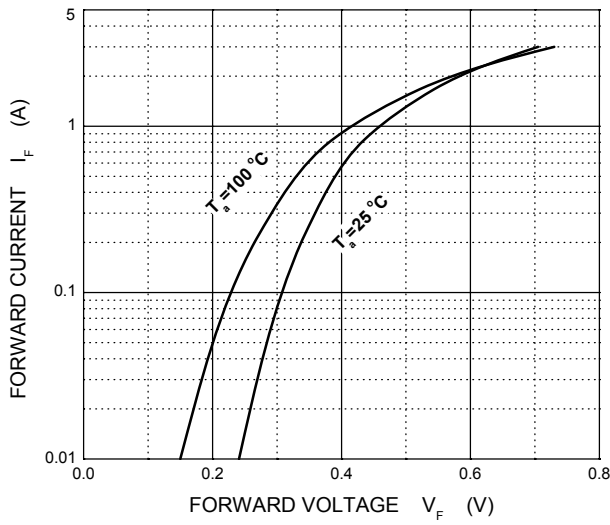
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	20 30 40	- - -	V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 30\text{ V}$ at $V_R = 40\text{ V}$ at $V_R = 4\text{ V}$ at $V_R = 6\text{ V}$	I_R	- - - - -	1 1 1 0.05 0.075	mA
Forward Voltage at $I_F = 0.1\text{ A}$ at $I_F = 1\text{ A}$ at $I_F = 3\text{ A}$	V_F	- - - - - -	0.45 0.45 0.55 0.6 0.75 0.875 0.9	V
Total Capacitance at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	120	pF

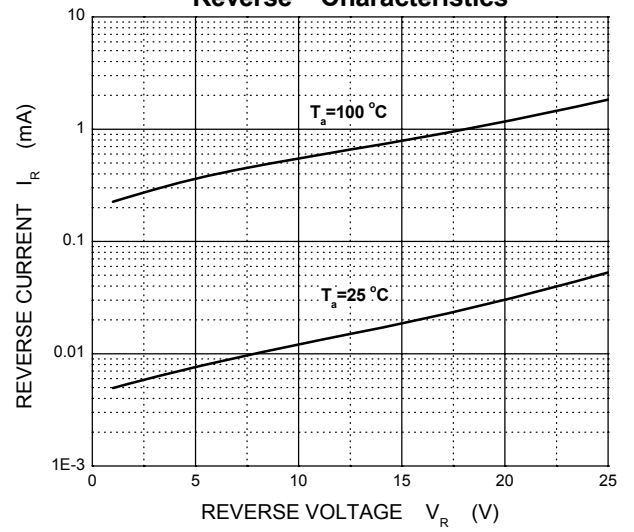
Typical Characteristics

1N5817W

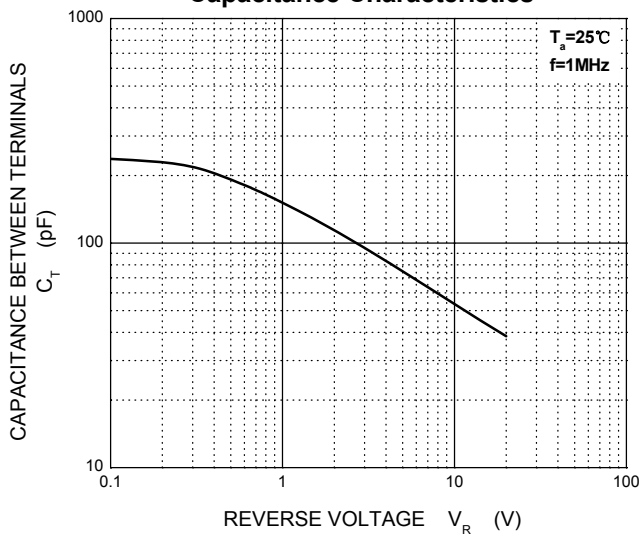
Forward Characteristics



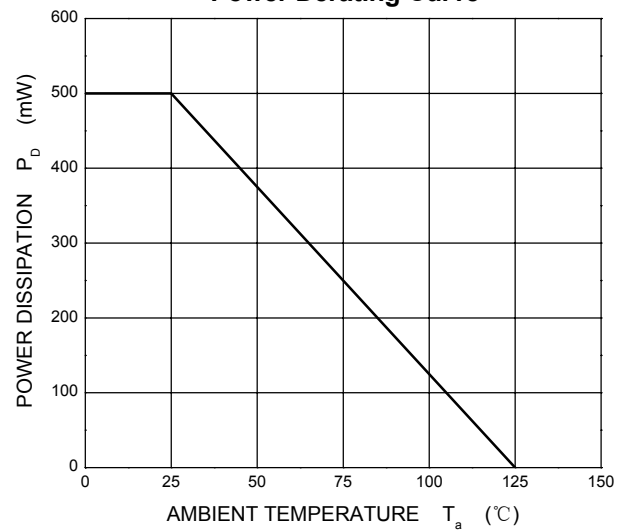
Reverse Characteristics



Capacitance Characteristics

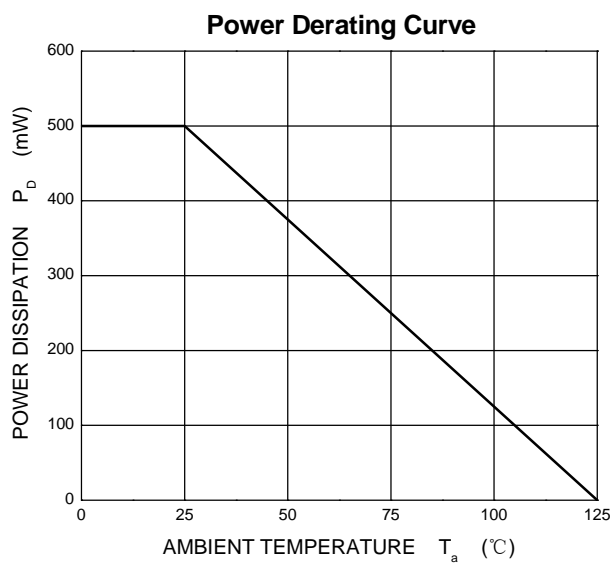
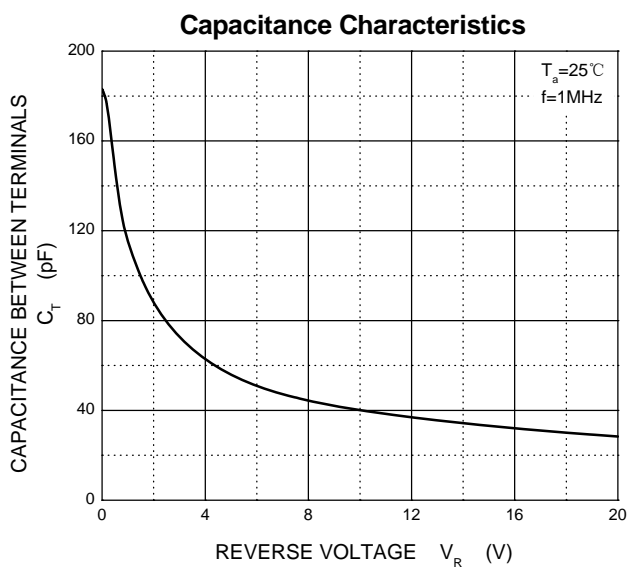
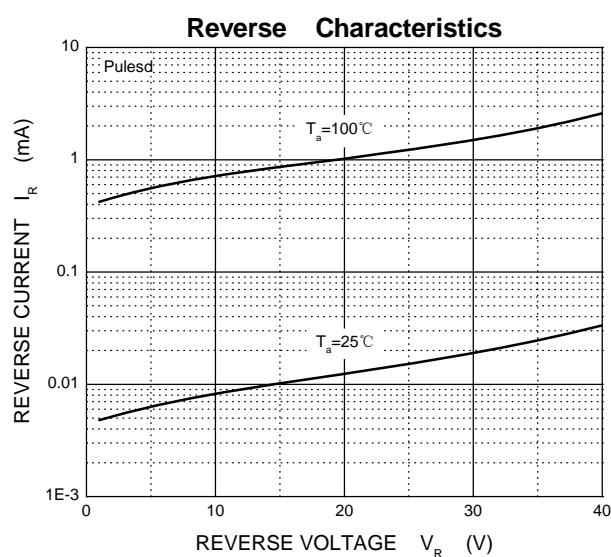
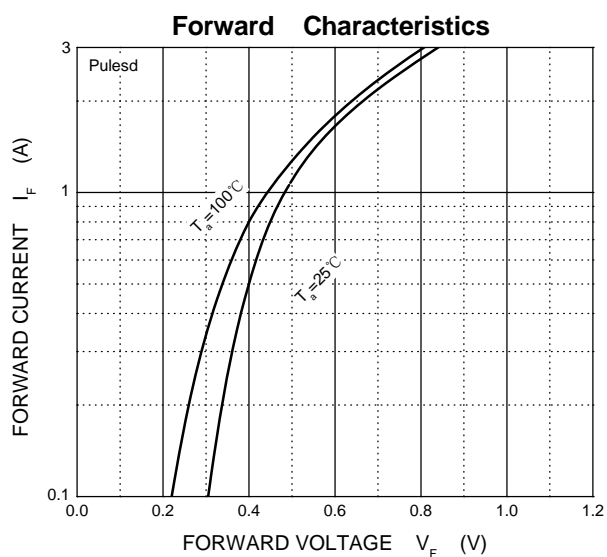


Power Derating Curve



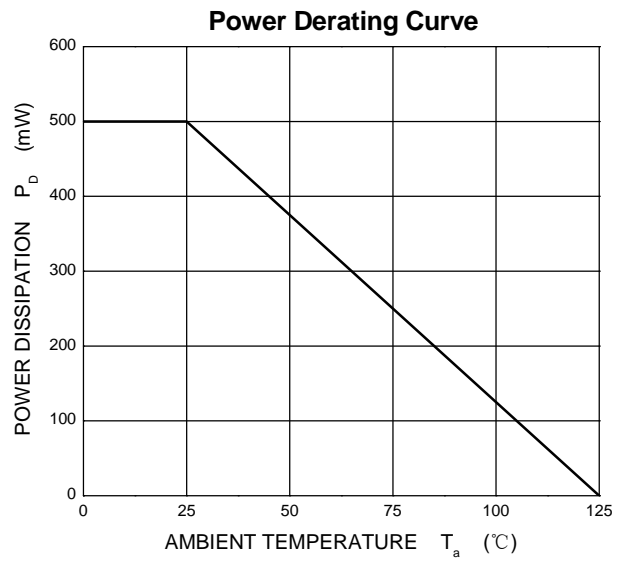
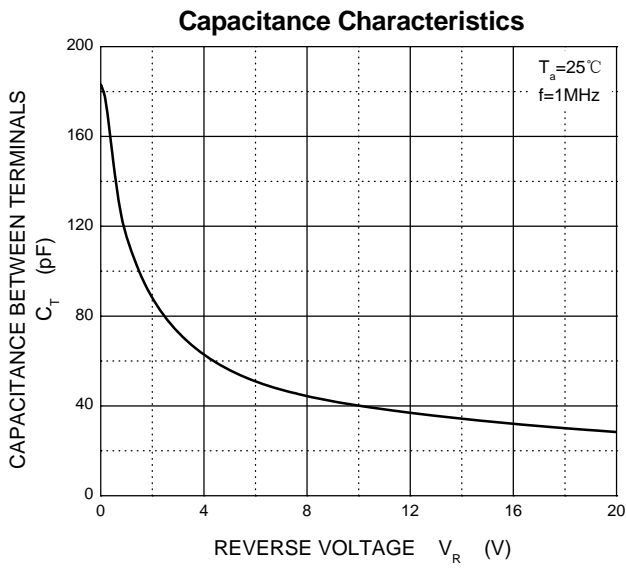
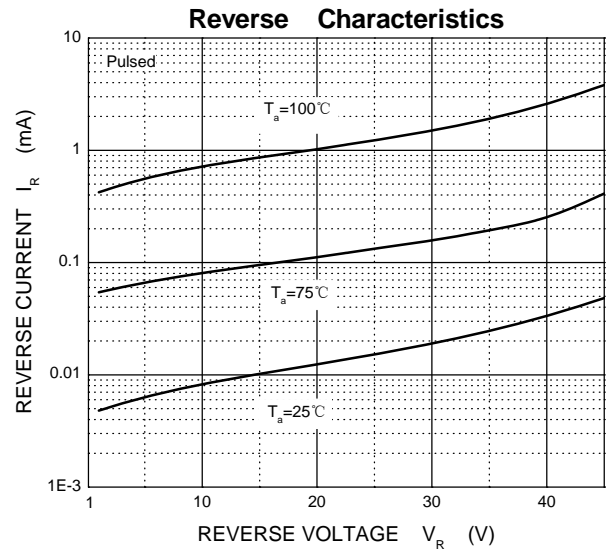
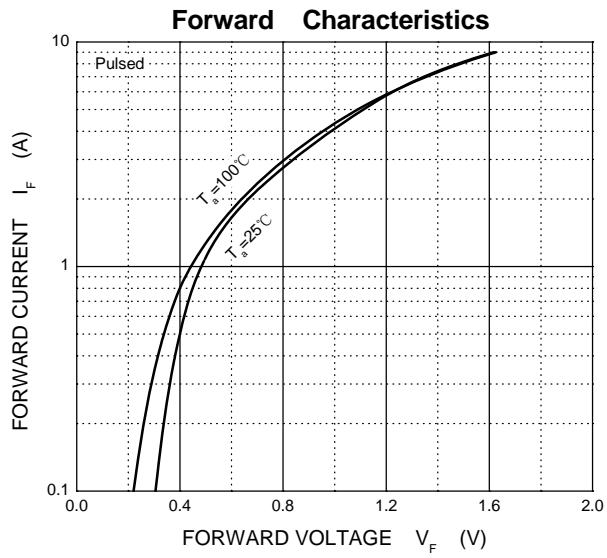
1N5818W

Typical Characteristics



1N5819W

Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123

