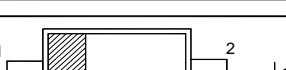


1N5817WB~1N5819WB

1 A Surface Mount Schottky Barrier Diode

PIN	DESCRIPTION
1	Cathode
2	Anode



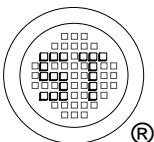
The diagram shows a rectangular outline with two leads extending from the bottom. The left lead is labeled '1' and has a hatched rectangle on its top segment, representing the cathode. The right lead is labeled '2' and has an open rectangle on its top segment, representing the anode. To the right of the leads is a symbol consisting of a vertical line with a triangle pointing to the right, and a horizontal line extending to the right from the base of the vertical line.

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

Parameter	Symbol	Value	Unit
Reverse Voltage 1N5817WB 1N5818WB 1N5819WB	V_R	20	V
		30	
		40	
Average Forward Rectified Current	$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current (8.3 ms Single Half Sine-Wave)	I_{FSM}	9	A
Power Dissipation	P_{tot}	450	mW
Operating Temperature Range	T_j	- 55 to + 125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	1N5817WB	$V_{(BR)R}$	20	-
	1N5818WB		30	-
	1N5819WB		40	-
Forward Voltage at $I_F = 0.1 \text{ A}$ at $I_F = 1 \text{ A}$ at $I_F = 3 \text{ A}$	1N5819WB	V_F	-	0.45
	1N5817WB		-	0.45
	1N5818WB		-	0.55
	1N5819WB		-	0.6
	1N5817WB		-	0.75
	1N5818WB		-	0.875
	1N5819WB		-	0.9
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 $V_R = 6 \text{ V}$	1N5817WB	I_R	-	1
	1N5818WB		-	1
	1N5819WB		-	1
	1N5819WB		-	0.05
	1N5819WB		-	0.075
Total Capacitance at $V_R = 4 \text{ V}$, $f = 1 \text{ MHz}$	C_{tot}	-	120	pF



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1N5817WB~1N5819WB

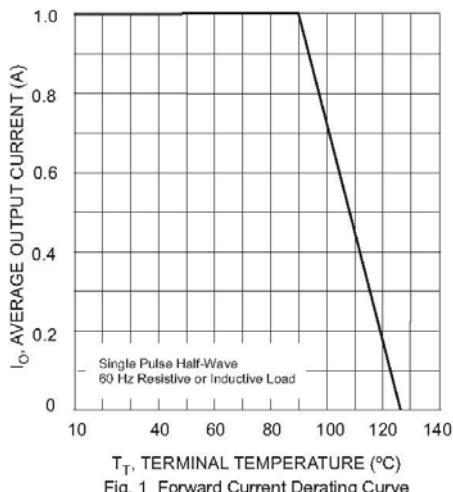


Fig. 1 Forward Current Derating Curve

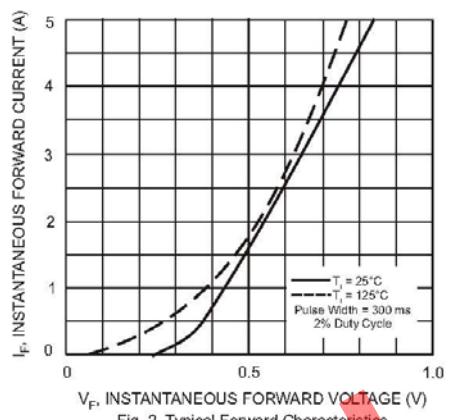


Fig. 2 Typical Forward Characteristics

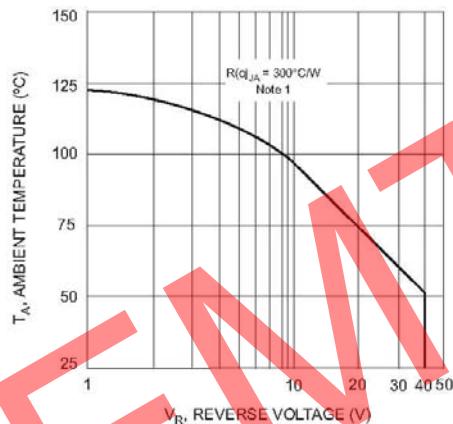


Fig. 3 Typical Safe Operating Area

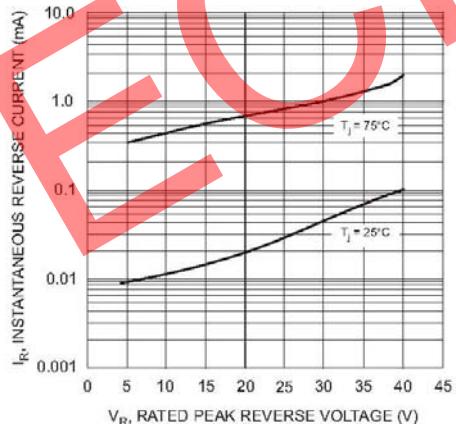


Fig. 4 Typical Reverse Characteristic

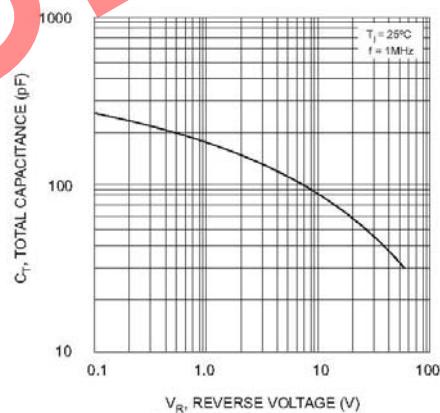
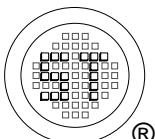


Fig. 5 Typical Total Capacitance



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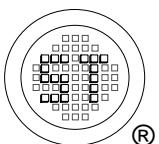
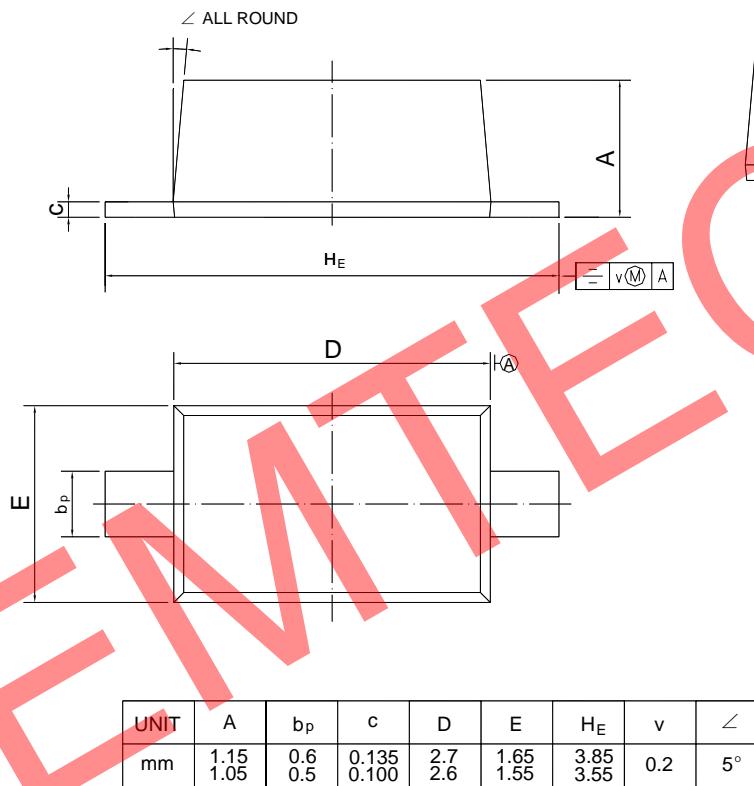
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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



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