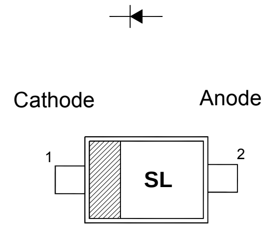
1N5817WS~1N5819WS

1 A Surface Mount Schottky Barrier Diode



MarKing Code: 1N5817WS SJ

1N5818WS SK

1N5819WS SL

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Reverse Voltage	1N5817WS	V_R	20	V
	1N5818WS		30	
	1N5819WS		40	
Average Forward Rectified Current		$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current (t = 8.3 ms)		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 °C

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

Fig. 1 - Forward Current Derating Curve

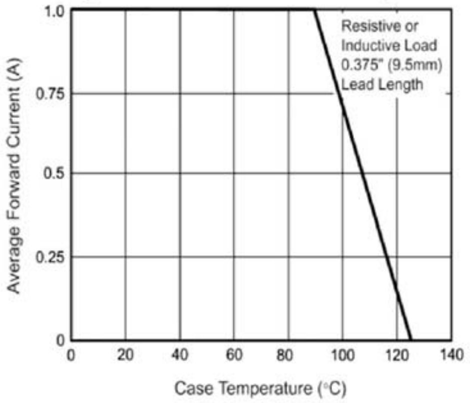


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

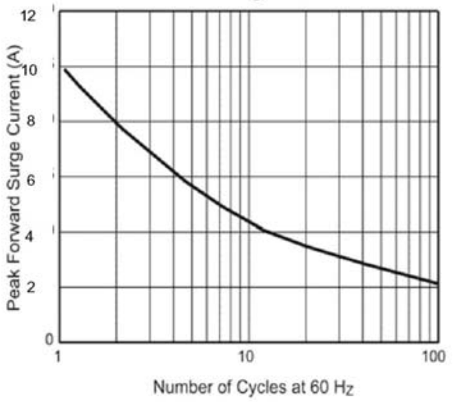


Fig. 3 - Typical Instantaneous Forward Characteristics

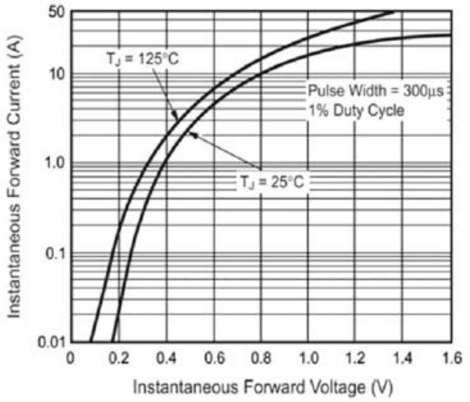


Fig. 4 - Typical Reverse Characteristics

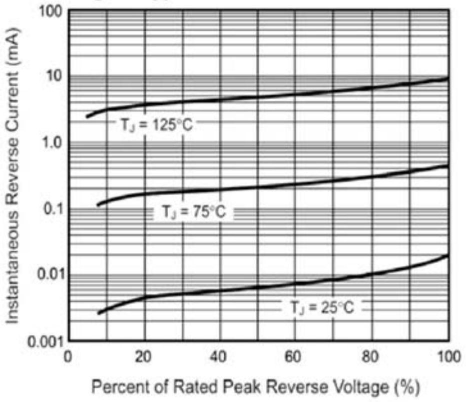


Fig. 5 - Typical Junction Capacitance

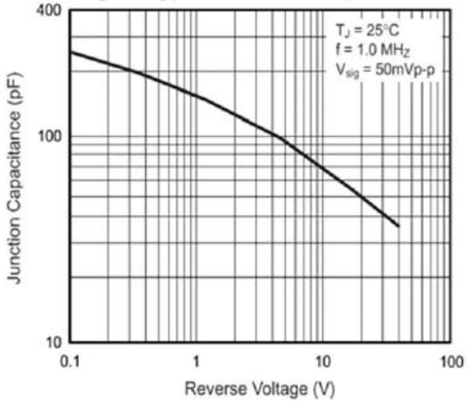
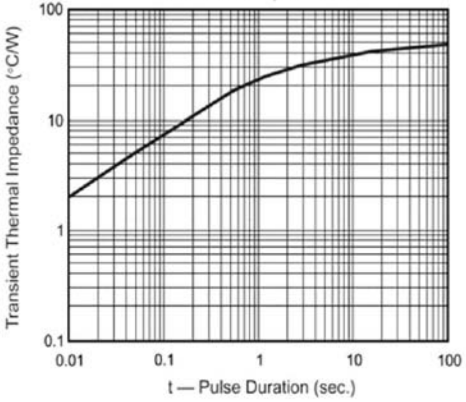
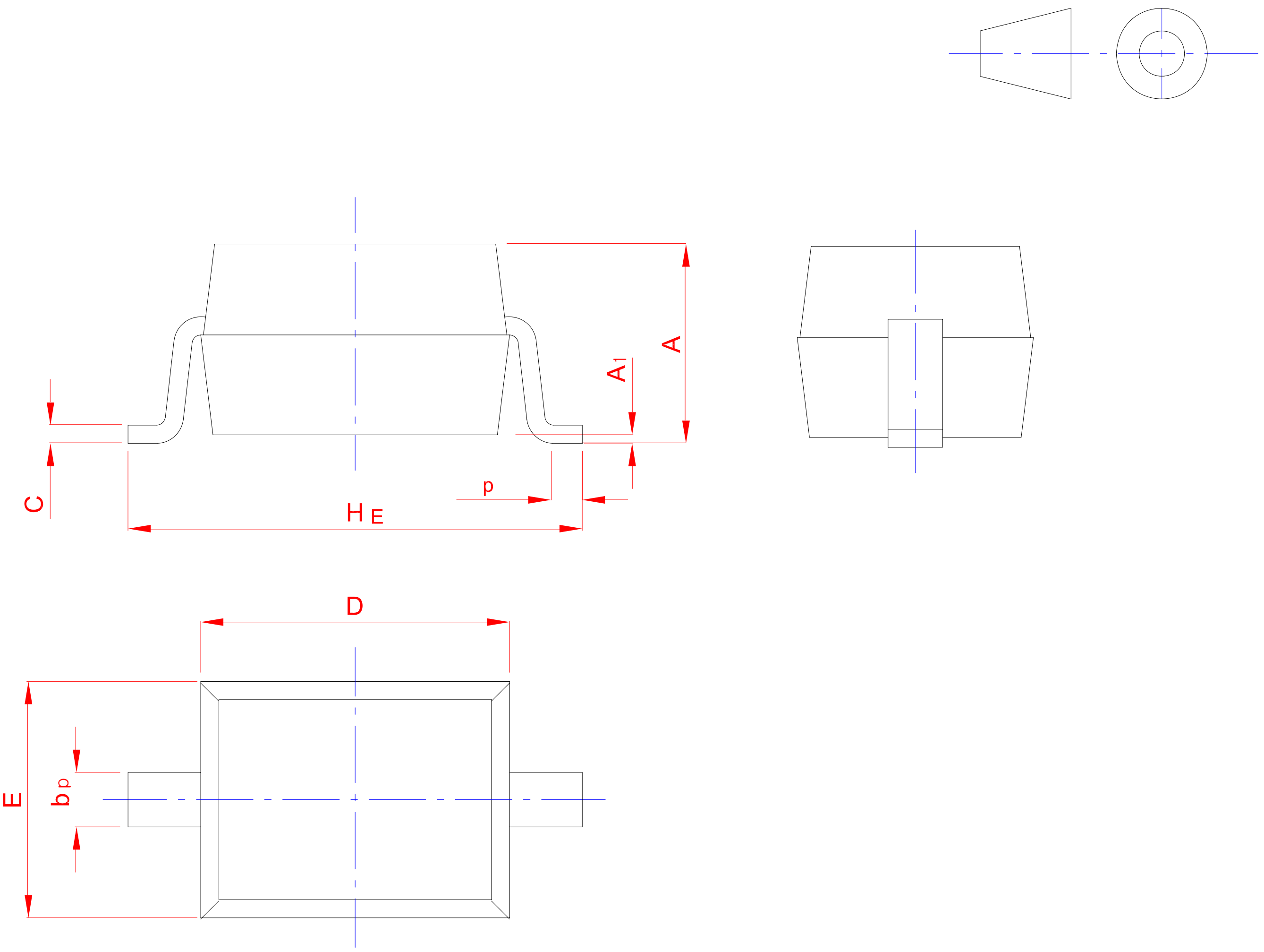


Fig. 6 - Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.00 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20