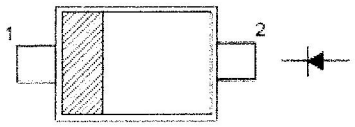
1N5817WS~1N5819WS

1 A Surface Mount Schottky Barrier Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: 1N5817WS: **SK**
1N5818 / 5819WS: **SL**
Simplified outline SOD-323 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

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

Fig. 1 - Forward Current Derating Curve

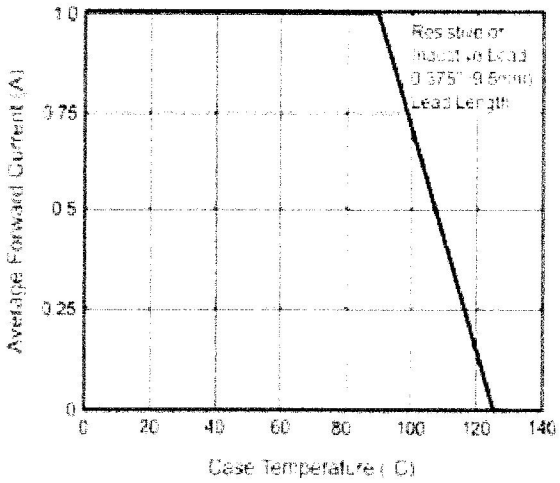


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

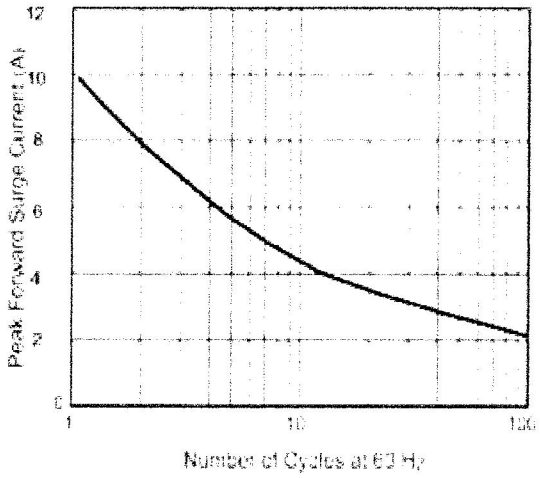


Fig. 3 - Typical Instantaneous Forward Characteristics

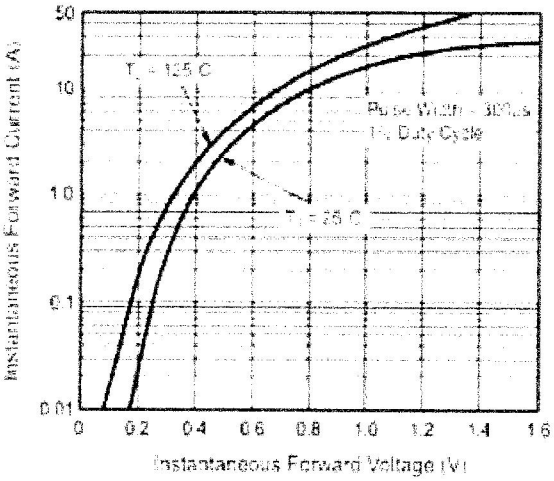


Fig. 4 - Typical Reverse Characteristics

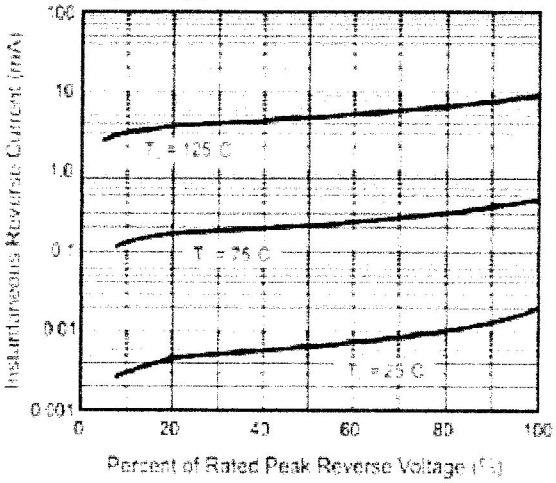


Fig. 5 - Typical Junction Capacitance

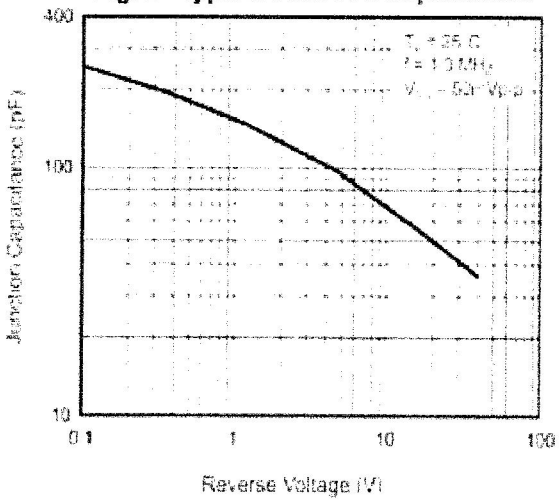
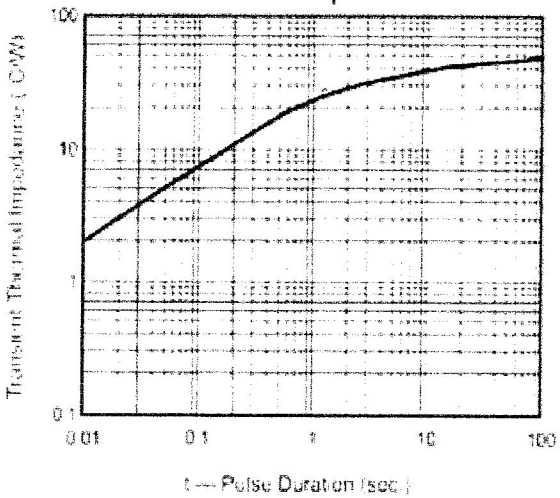


Fig. 6 - Typical Transient Thermal Impedance



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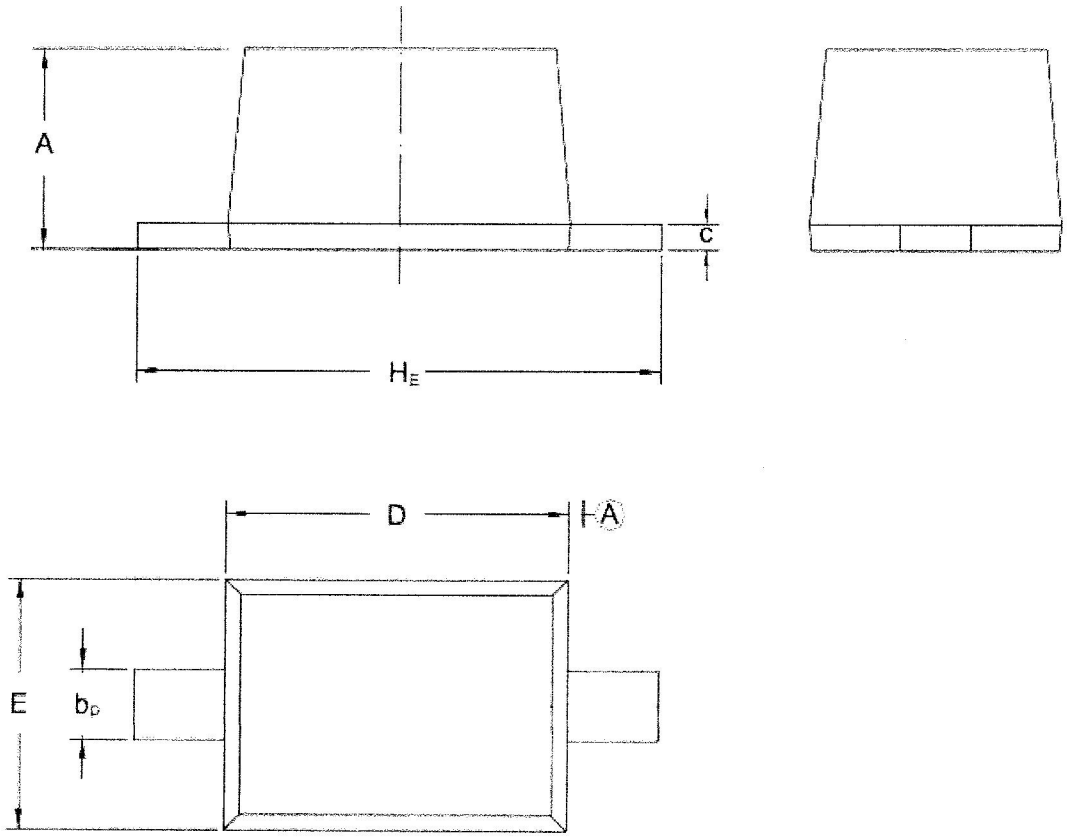
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30