

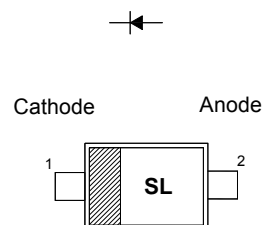
VC1N5817WSB/VC1N5818WSB/VC1N5819WSB

1 A Surface Mount Schottky Barrier Diode

Marking Code: VC1N5817WSB IIISJ

VC1N5818WSB IIISK

VC1N5819WSB IIISL , ISL



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

Parameter		Value	Unit
Reverse Voltage	VC1N5817WSB VC1N5818WSB VC1N5819WSB	V_R 20 30 40	V
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		Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	VC1N5817WSB VC1N5818WSB VC1N5819WSB	$V_{(BR)R}$	20 30 40	- - -	V
Forward Voltage at $I_F = 1\text{ A}$	VC1N5817WSB VC1N5818WSB VC1N5819WSB	V_F	- - -	0.45 0.55 0.6	V
at $I_F = 3\text{ A}$	VC1N5817WSB VC1N5818WSB VC1N5819WSB		- - -	0.75 0.875 0.9	
Reverse Voltage Leakage Current at $V_R = 20\text{ V}$ at $V_R = 30\text{ V}$ at $V_R = 40\text{ V}$	VC1N5817WSB VC1N5818WSB VC1N5819WSB	I_R	- - -	1 1 1	mA
Total Capacitance at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$		C_{tot}	-	120	pF

Fig. 1 - Forward Current Derating Curve

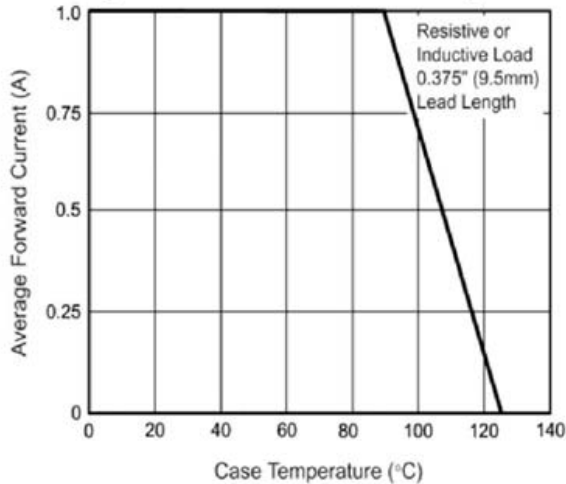


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

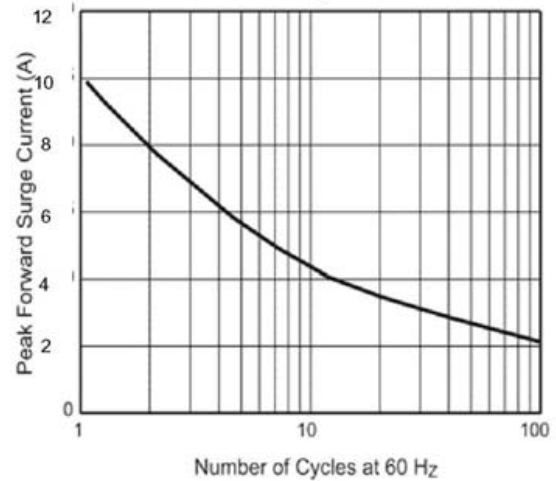


Fig. 3 - Typical Instantaneous Forward Characteristics

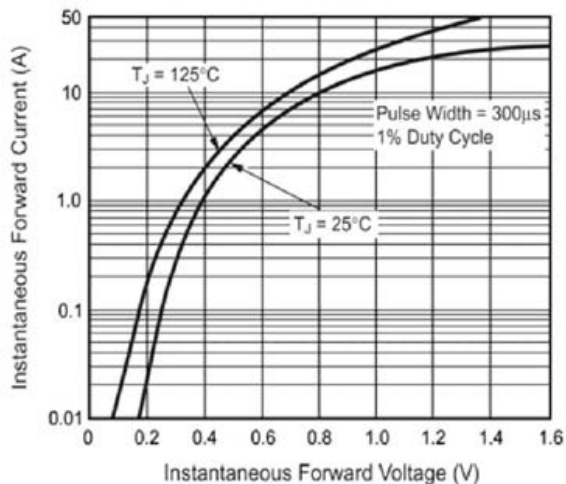


Fig. 4 - Typical Reverse Characteristics

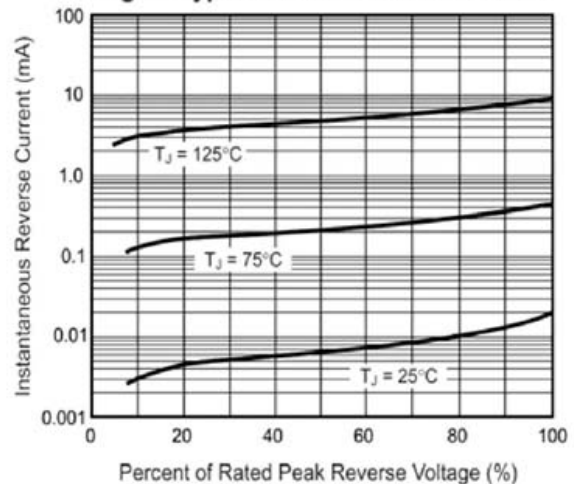


Fig. 5 - Typical Junction Capacitance

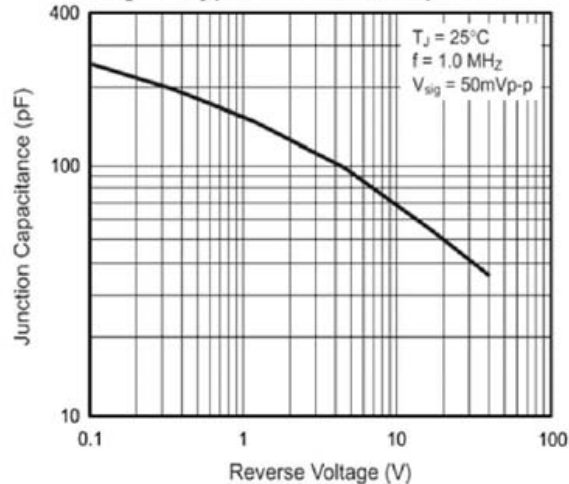
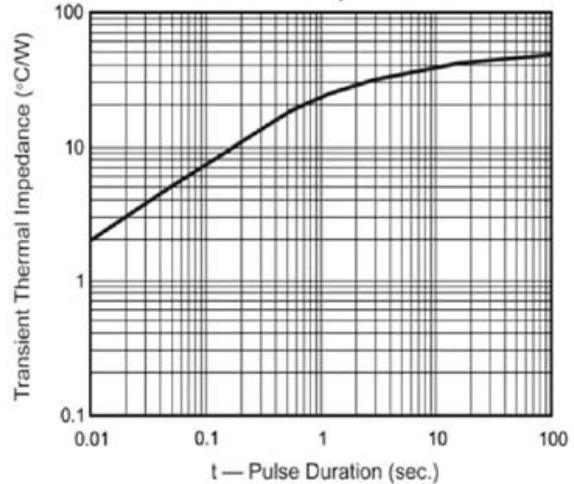


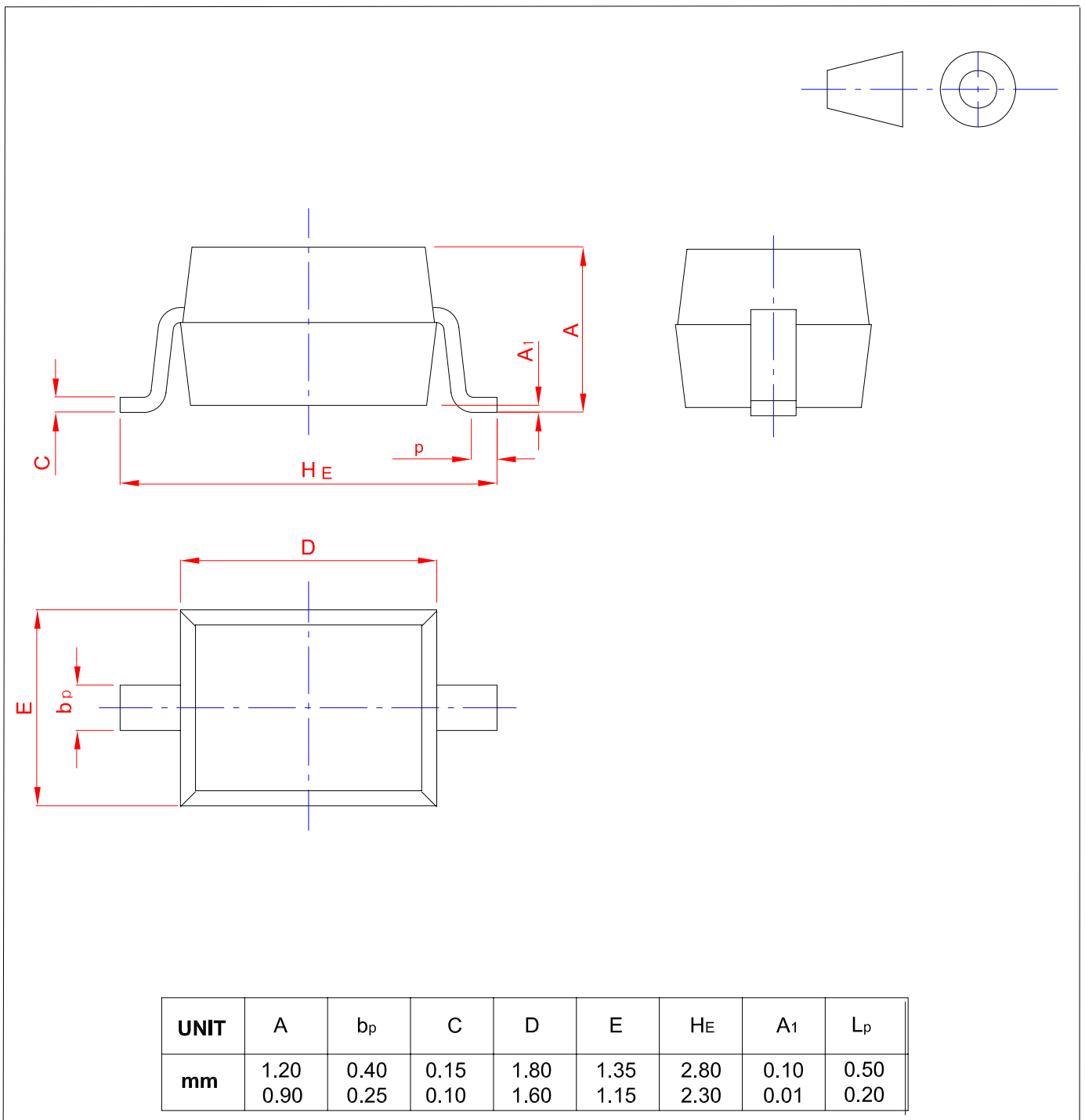
Fig. 6 - Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD



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