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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	10	V
Average Forward Rectified Current	$I_{F(AV)}$	2.0	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	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	10	-	V
Forward Voltage at $I_F = 1\text{ A}$	V_F	-	0.6	V
at $I_F = 3\text{ A}$		-	0.9	
Reverse Voltage Leakage Current at $V_R = 40\text{ V}$	I_R	-	1	mA
Total Capacitance at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	120	pF

Fig. 1 - Forward Current Derating Curve

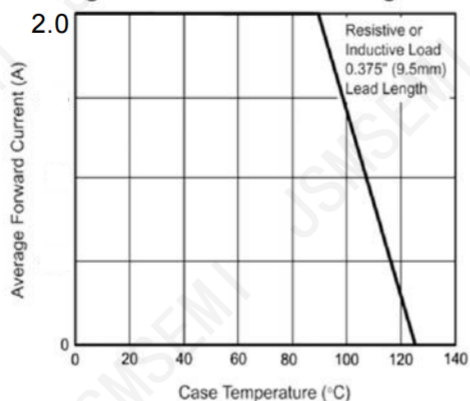


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

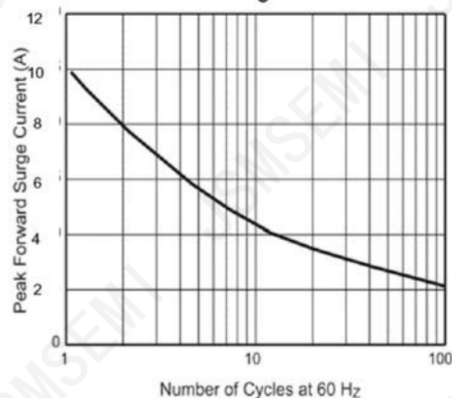


Fig. 3 - Typical Instantaneous Forward Characteristics

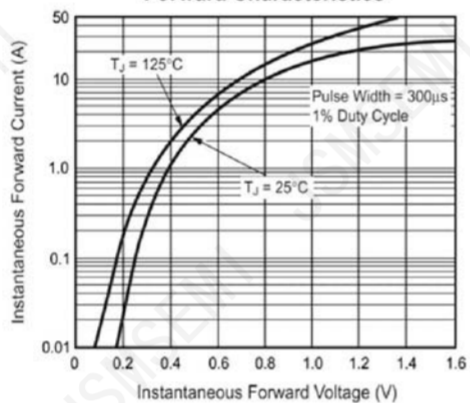


Fig. 4 - Typical Reverse Characteristics

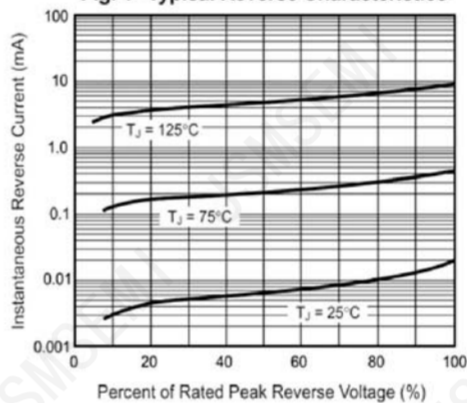


Fig. 5 - Typical Junction Capacitance

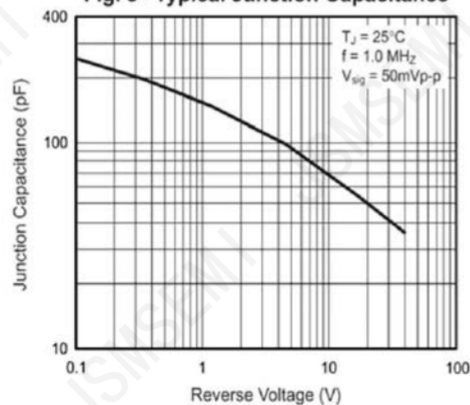
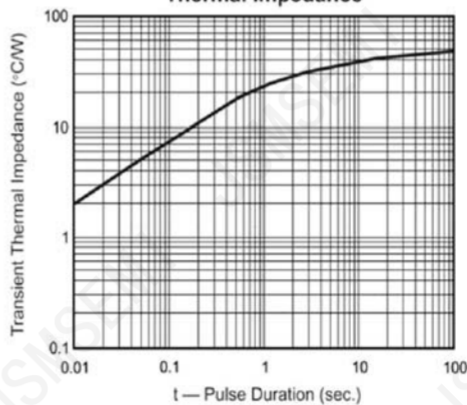


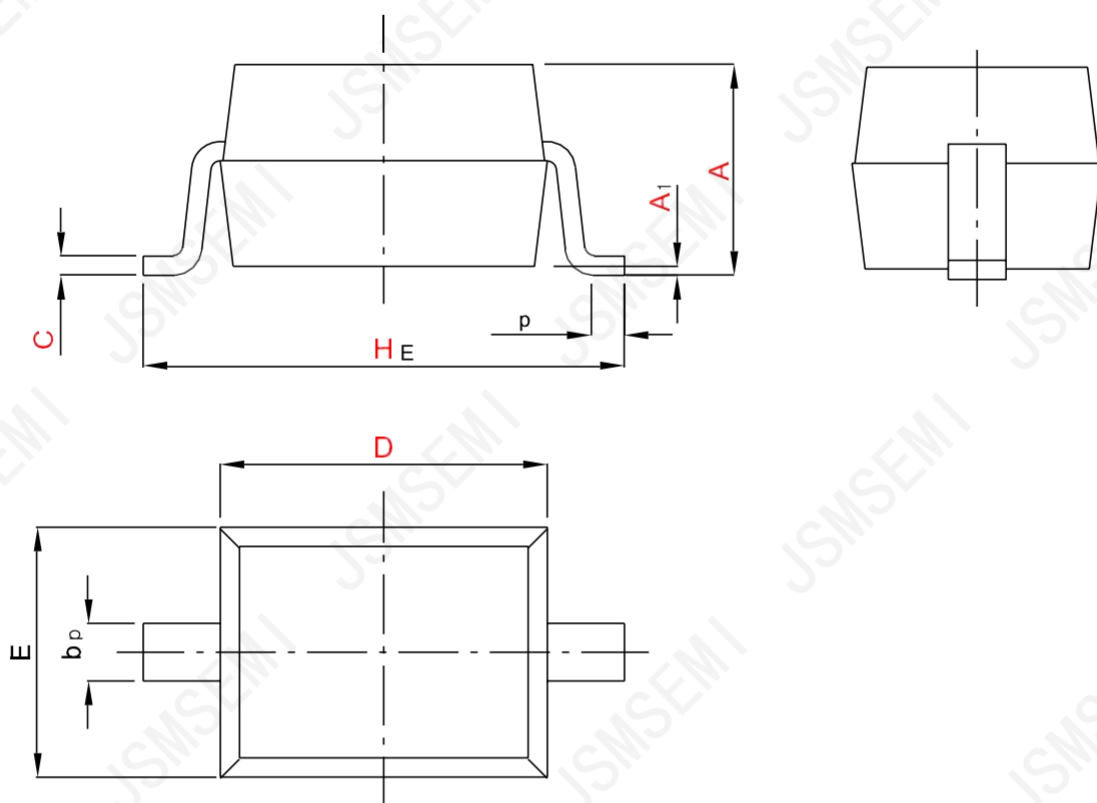
Fig. 6 - Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD323



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20 0.90	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



Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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