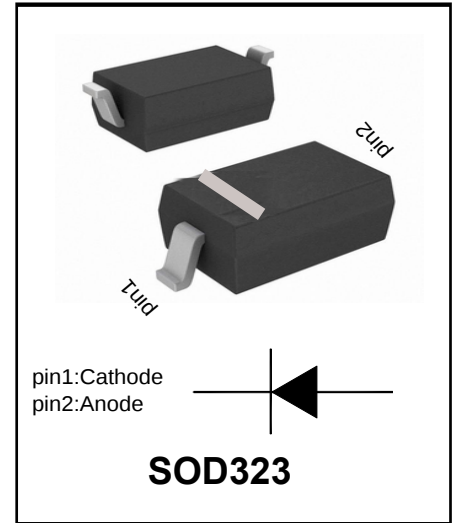


■ Features

- Low power loss, high efficiency
- High current capability
- Low forward voltage drop
- High Surge Capability
- Marling:SL



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

Parameter	Symbol	Value	Unit
Reverse Voltage	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	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1\text{ mA}$	40		V
Reverse voltage leakage current	I_R	$V_R = 40\text{ V}$ $V_R = 4\text{ V}$ $V_R = 6\text{ V}$		1 0.05 0.075	mA
Forward voltage	V_F	$I_F = 0.1\text{ A}$ $I_F = 1\text{ A}$ $I_F = 3\text{ A}$		0.45 0.6 0.9	V
Diode capacitance	C_D	$V_R = 4\text{ V}$, $f = 1\text{ MHz}$		120	pF

Fig. 1 - Forward Current Derating Curve

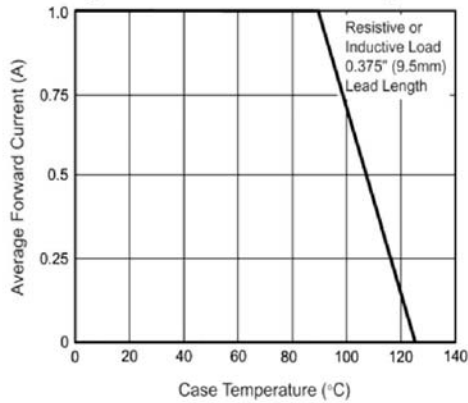


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

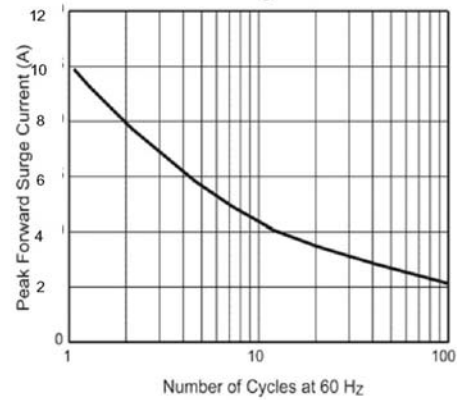


Fig. 3 - Typical Instantaneous Forward Characteristics

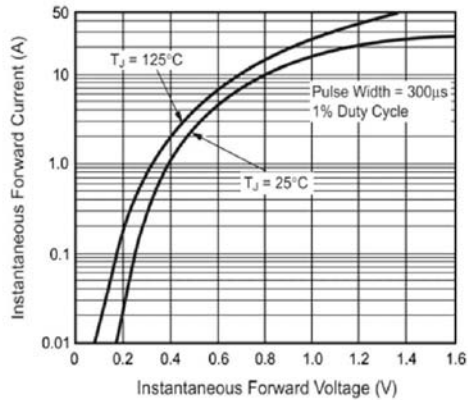


Fig. 4 - Typical Reverse Characteristics

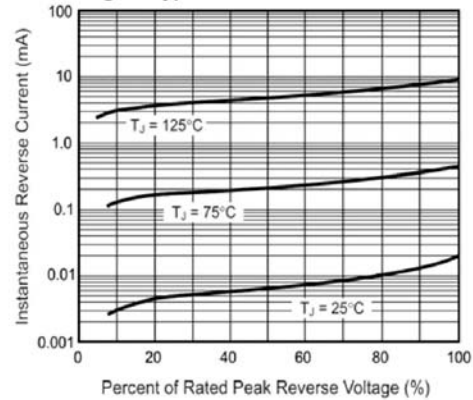


Fig. 5 - Typical Junction Capacitance

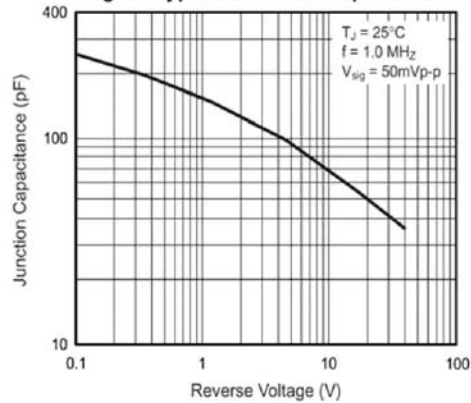
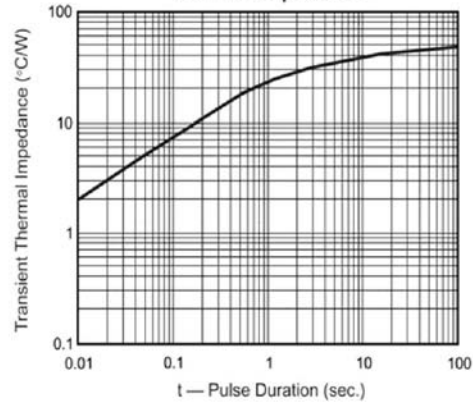


Fig. 6 - Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

