

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300	V
Working Peak Reverse Voltage DC Blocking Voltage	V _{RWM}	300	V
Forward Current (Note 6)	l _F	250	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0µs	I _{FSM}	4.5	A
Repetitive Peak Forward Current (Note 6)	I _{FRM}	1	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P_{D}	325	mW
Thermal Resistance Junction to Ambient Air (Note 6)	$R_{ heta JA}$	385	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

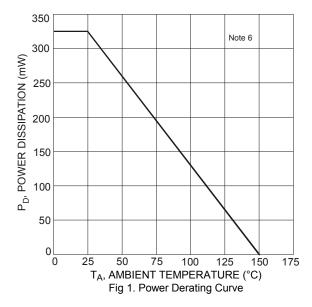
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

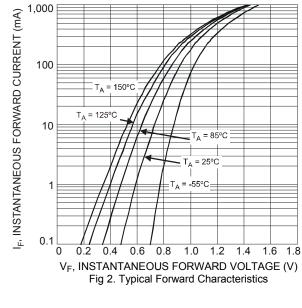
Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 7)	V _{(BR)R}	300	_	V	I _R = 100μA
Forward Voltage	V _F	_	1.1	V	I _F = 100mA
Reverse Current (Note 7)	I _R	_ _ _	50 150 100	nA nA μA	$V_R = 5V$ $V_R = 250V$ $V_R = 250V, T_J = +150^{\circ}C$
Total Capacitance	C _T	_	5	pF	V _R = 0, f = 1.0MHz
Reverse Recovery Time	t _{rr}	_	50	ns	$I_F = I_R = 30 \text{mA},$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$

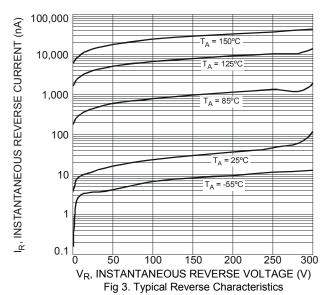
Notes:

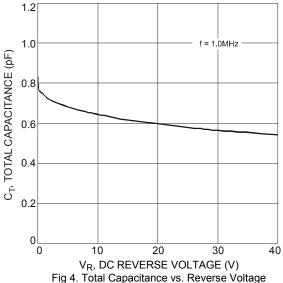
^{6.} Part mounted on FR-4 board with recommended pad layout, which can be found on our website at http://www.diodes.com. 7. Short duration pulse test used to minimize self-heating effect.









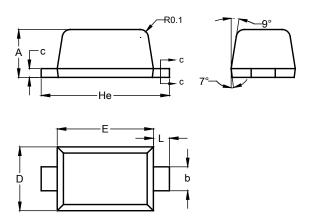




Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOD523

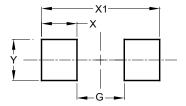


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Dim	Min	Max	
Α	0.55	0.65	
b	0.26	0.34	
С	0.11	0.17	
D	0.75	0.85	
Е	1.15	1.25	
He	1.55	1.65	
Ĺ	0.10	0.30	
All Dimensions in mm			

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

SOD523



Dimensions	Value (in mm)
G	0.80
Х	0.60
X1	2.00
Υ	0.70



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