

# **Maximum Ratings** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic		Symbol	Value	Unit	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>R</sub> WM V <sub>R</sub>	85	V	
RMS Reverse Voltage		V <sub>R(RMS)</sub>	60	V	
Forward Continuous Current (Note 5)		I <sub>FM</sub>	215	mA	
Repetitive Peak Forward Current		I <sub>FRM</sub>	500	mA	
© t = 1.0μs Non-Repetitive Peak Forward Surge Current © t = 1.0μs © t = 1.0μs © t = 1.0μs		I <sub>FSM</sub>	4.0 1.0 0.5	А	

## **Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P <sub>D</sub>	200	mW
Thermal Resistance Junction to Ambient Air (Note 5)	$R_{ hetaJA}$	625	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

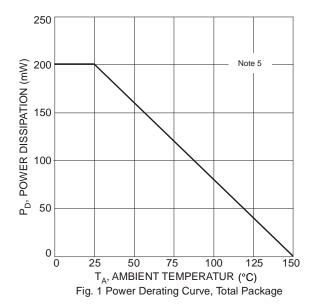
# Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

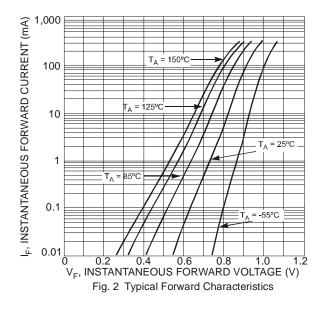
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	$V_{(BR)R}$	85	_	_	V	$I_R = 100\mu A$
Forward Voltage	V <sub>F</sub>	_	_	0.9 1.0 1.1 1.25	V	$I_F = 1.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$
Leakage Current (Note 6)	I <sub>R</sub>	_	_	5.0 80	nA nA	V <sub>R</sub> = 75V V <sub>R</sub> = 75V, T <sub>J</sub> = +150°C
Total Capacitance	C <sub>T</sub>	_	1.5	_	pF	$V_R = 0, f = 1.0MHz$
Reverse Recovery Time	t <sub>RR</sub>			3.0	μs	$I_F = I_R = 10 \text{mA},$ $I_{RR} = 0.1 \text{ x } I_R, R_L = 100 \Omega$

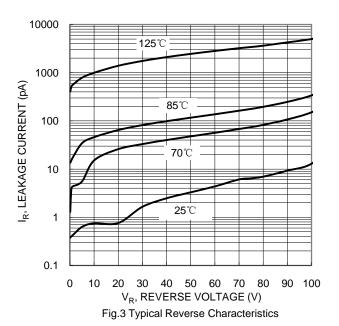
Notes: 5. Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com/package- outlines.html.

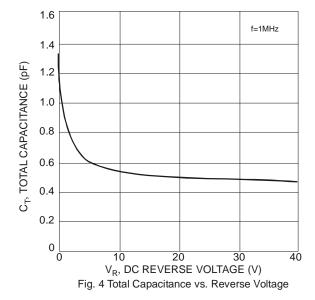
<sup>6.</sup> Short duration pulse test used to minimize self-heating effect.









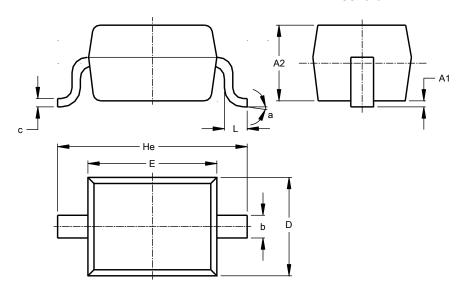




# **Package Outline Dimensions**

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

#### **SOD323**

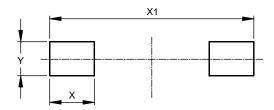


SOD323				
Dim	Min	Max	Тур	
A1		0.10	0.05	
A2	1.00	1.10	1.05	
b	0.25	0.35	0.30	
С	0.10	0.15	0.11	
D	1.20	1.40	1.30	
Е	1.60	1.80	1.70	
He	2.30	2.70	2.50	
L	0.20	0.40	0.30	
а	80			
All Dimensions in mm				

# **Suggested Pad Layout**

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

### **SOD323**



Dimensions	Value (in mm)
Х	0.590
X1	2.700
Υ	0.450



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