

**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>RWM</sub> V <sub>R</sub>	100	V
Forward Continuous Current	I <sub>F</sub>	150	mA
Repetitive Peak Forward Current (Note 5) @ t <sub>p</sub> < 1.0s, Duty Cycle < 50%	I <sub>FRM</sub>	350	mA
Forward Surge Forward Current (Note 5) @ t <sub>p</sub> = 10ms	I <sub>FSM</sub>	750	mA

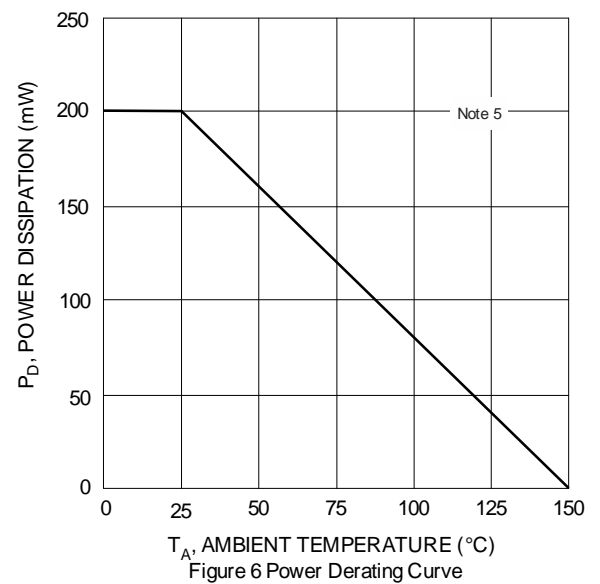
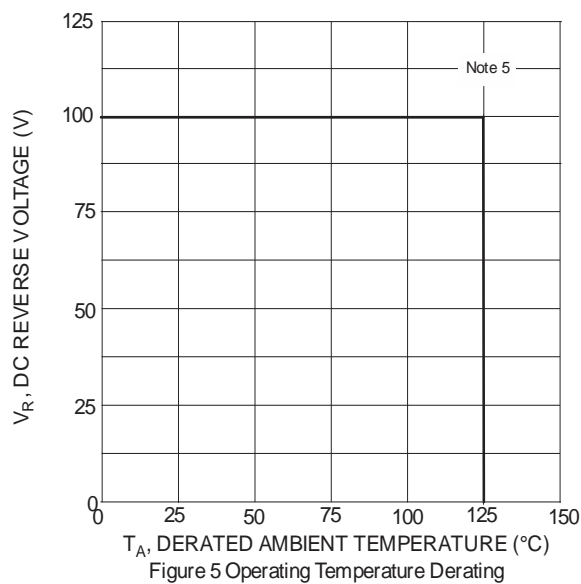
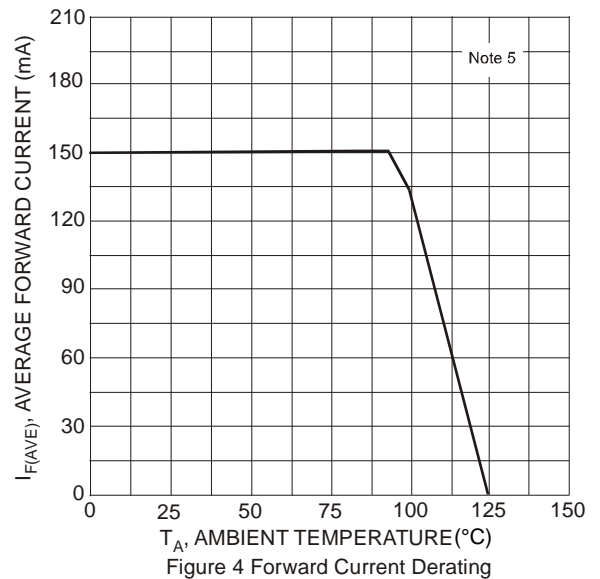
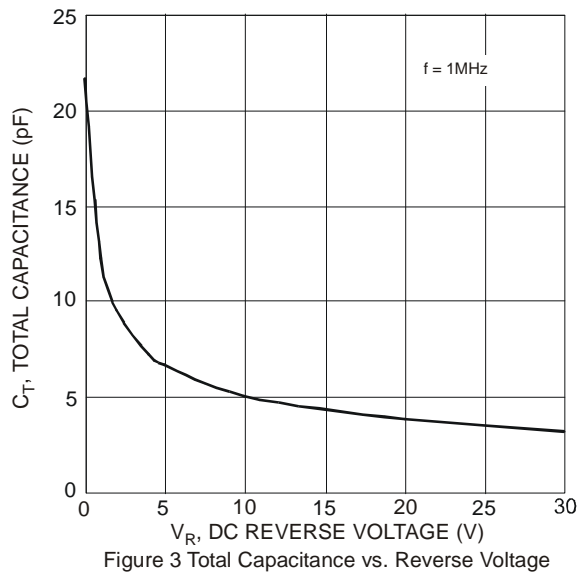
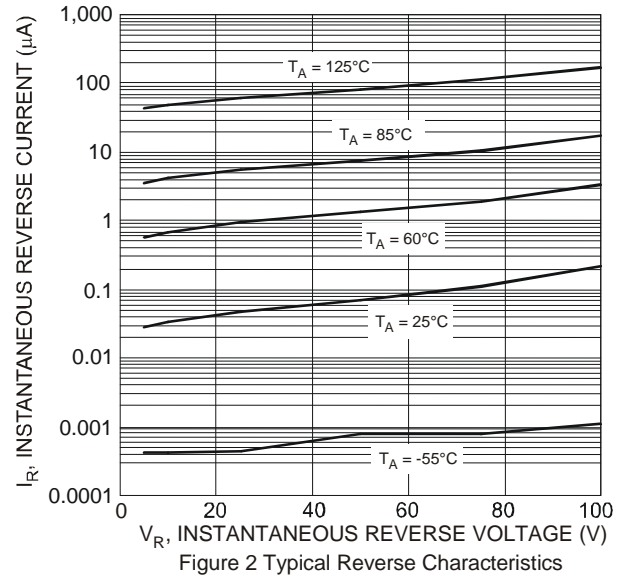
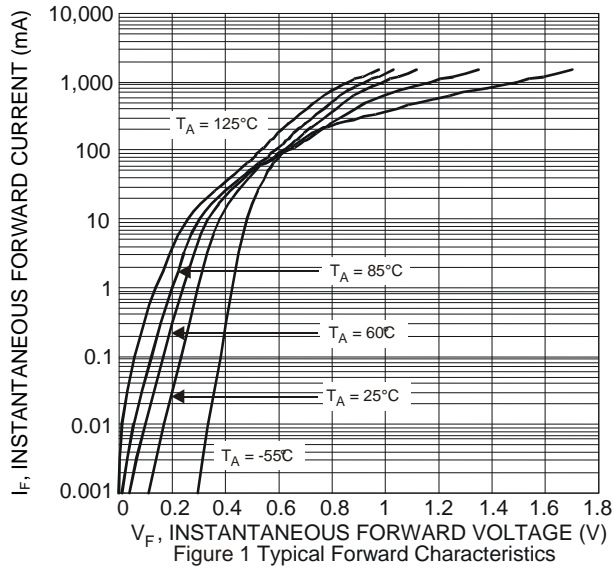
**Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	R <sub>θJA</sub>	420	°C/W
Thermal Resistance, Junction to Ambient Air (Note 6)		370	
Operating Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 7)	V <sub>(BR)R</sub>	100	—	—	V	I <sub>R</sub> = 100μA
Forward Voltage	V <sub>F</sub>	—	—	0.25 0.45 1.00	V	I <sub>F</sub> = 0.1mA I <sub>F</sub> = 10mA I <sub>F</sub> = 250mA
Peak Reverse Current (Note 7)	I <sub>R</sub>	—	—	0.3 5.0 0.5 7.5 1.0 15 2.0 20	μA	V <sub>R</sub> = 1.5V V <sub>R</sub> = 1.5V, T <sub>J</sub> = +60°C V <sub>R</sub> = 10V V <sub>R</sub> = 10V, T <sub>J</sub> = +60°C V <sub>R</sub> = 50V V <sub>R</sub> = 50V, T <sub>J</sub> = +60°C V <sub>R</sub> = 75V V <sub>R</sub> = 75V, T <sub>J</sub> = +60°C
Total Capacitance	C <sub>T</sub>	—	20 12	—	pF	V <sub>R</sub> = 0V, f = 1.0MHz V <sub>R</sub> = 1.0V, f = 1.0MHz

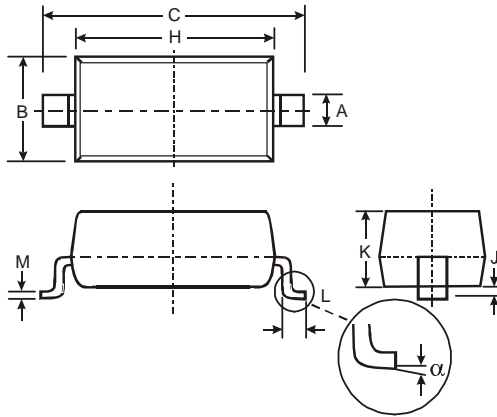
- Notes:
- Part mounted on FR-4 board with recommended pad layout, which can be found on our website at [http://www.diodes.com/product\\_compliance\\_definitions.html](http://www.diodes.com/product_compliance_definitions.html).
  - Part mounted on Polymide board with recommended pad layout, which can be found on our website at [http://www.diodes.com/product\\_compliance\\_definitions.html](http://www.diodes.com/product_compliance_definitions.html).
  - 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.

### SOD123

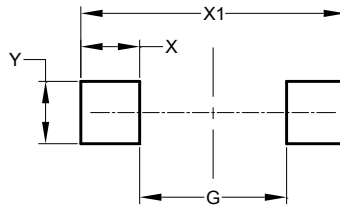


SOD123		
Dim	Min	Max
A	0.55 Typ	
B	1.40	1.70
C	3.55	3.85
H	2.55	2.85
J	0.00	0.10
K	1.00	1.35
L	0.25	0.40
M	0.10	0.15
$\alpha$	0	8°
All Dimensions in mm		

## Suggested Pad Layout

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

### SOD123



Dimensions	Value (in mm)
G	2.250
X	0.900
X1	4.050
Y	0.950

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