

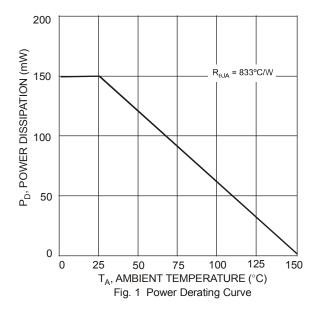
### Thermal Characteristics

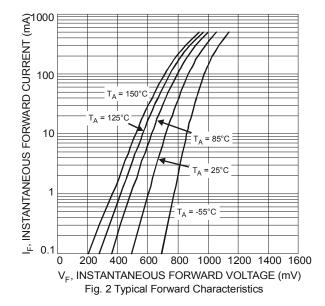
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 7)	PD	150	mW
Thermal Resistance Junction to Ambient (Note 7)	R <sub>0JA</sub>	833	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

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

Characteristic	Symbol	Min	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 8)	V <sub>(BR)R</sub>	80		V	I <sub>R</sub> = 100μA
Forward Voltage		0.62	0.72	V	I <sub>F</sub> = 5.0mA
	VF	_	0.855		I <sub>F</sub> = 10mA
	VF		1.0		I <sub>F</sub> = 100mA
		_	1.25		I <sub>F</sub> = 150mA
Peak Reverse Current (Note 8)		_	100	nA	V <sub>R</sub> = 80V
			50	μA	V <sub>R</sub> = 75V, T <sub>J</sub> = +150°C
	IR		30	μA	V <sub>R</sub> = 25V, T <sub>J</sub> = +150°C
			25	nA	V <sub>R</sub> = 20V
Total Capacitance	CT		3.0	pF	V <sub>R</sub> = 0.5V, f = 1.0MHz
Reverse Recovery Time	+		4.0	ns	$I_{\rm F} = I_{\rm R} = 10 {\rm mA},$
	t <sub>rr</sub>				I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

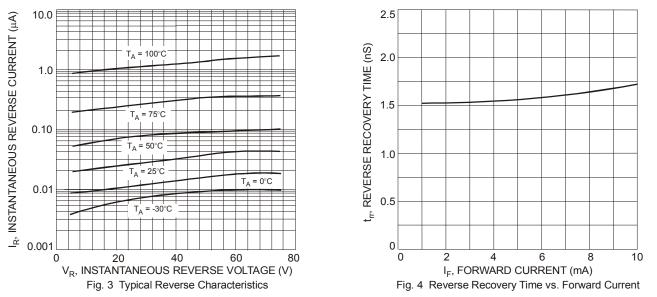
Notes: 7. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at http://www.diodes.com. 8. Short duration pulse test used to minimize self-heating effect.





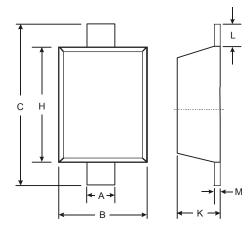






# **Package Outline Dimensions**

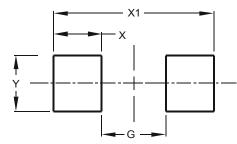
Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for latest version.



SOD523					
Dim	Min	Max			
Α	0.25	0.35			
В	0.70	0.90			
С	1.50	1.70			
Н	1.10	1.30			
K	0.55	0.65			
_	0.10	0.30			
М	0.10	0.12			
All Dimensions in mm					

## **Suggested Pad Layout**

Please see AP02001 at http://www.diodes.com/datasheets/ap02001.pdf for the latest version.



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



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