

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

Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitance load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>RM</sub>		
Average Rectified Output Current (See Figure 1)	I <sub>O</sub>	2.0	A
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	V
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	50	A

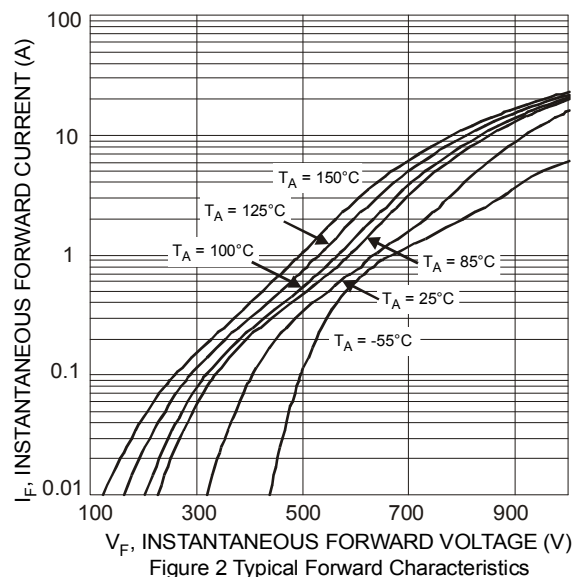
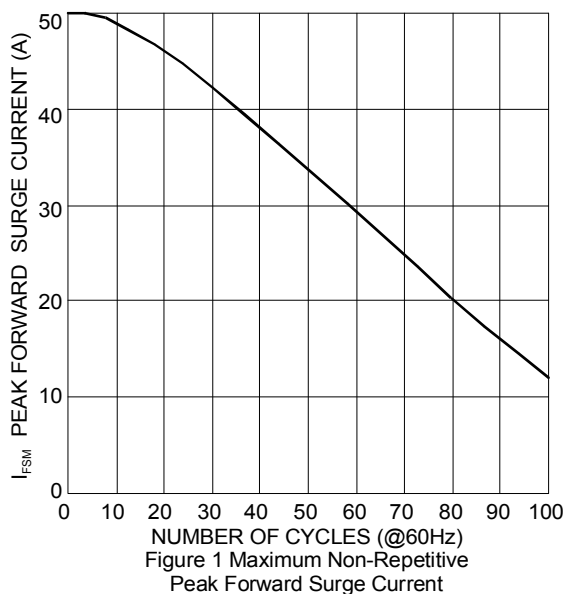
## Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Terminal (Note 5)	R <sub>θJT</sub>	25	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +125	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	—	—	0.79	V	I <sub>F</sub> = 2.0A, T <sub>A</sub> = +25°C
		—	—	0.69	V	I <sub>F</sub> = 2.0A, T <sub>A</sub> = +100°C
Peak Reverse Current at Rated DC Blocking Voltage	I <sub>RM</sub>	—	—	0.5	mA	V <sub>R</sub> = 100V, T <sub>A</sub> = +25°C
		—	—	15	mA	V <sub>R</sub> = 100V, T <sub>A</sub> = +100°C
Typical Total Capacitance (Note 6)	C <sub>T</sub>	—	75	—	pF	V <sub>R</sub> = 4V, f = 1MHz

Notes: 5. Valid provided that terminals are kept at ambient temperature.  
 6. Short duration pulse test used to minimize self-heating effect.



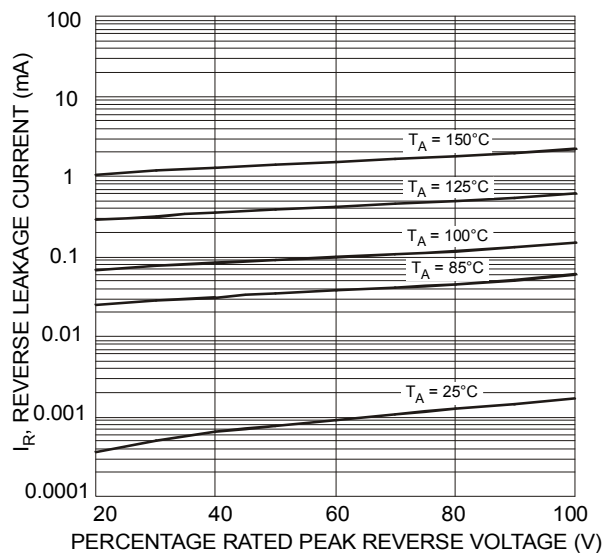


Figure 3 Typical Reverse Characteristics

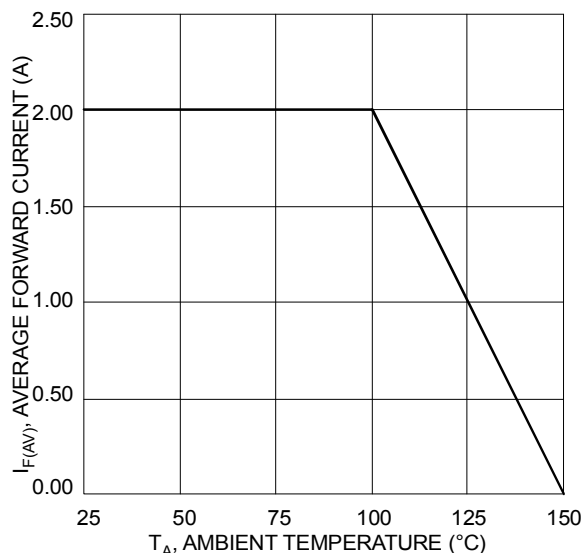


Figure 4 Forward Current Derating Curve

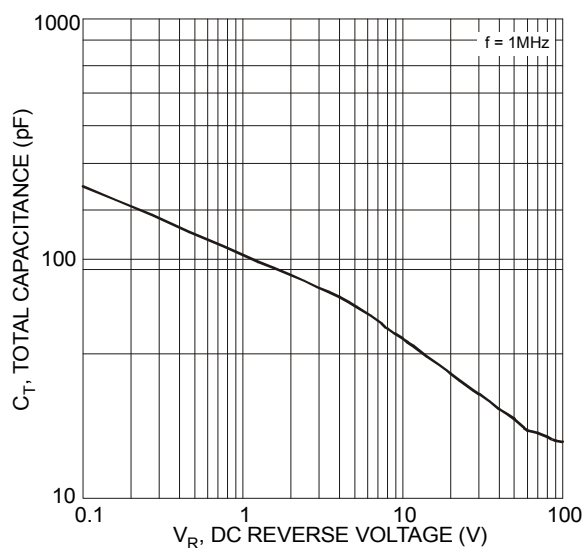
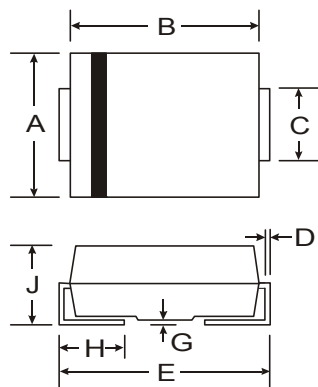


Figure 5 Total Capacitance vs. Reverse Voltage

## Package Outline Dimensions

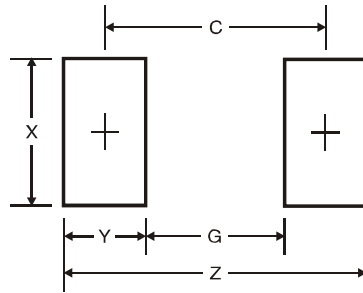
Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for latest version.



SMA		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.05	0.20
H	0.76	1.52
J	2.01	2.30
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)
<b>Z</b>	6.5
<b>G</b>	1.5
<b>X</b>	1.7
<b>Y</b>	2.5
<b>C</b>	4.0

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