



## 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>	30	V
Average Rectified Output Current	I <sub>O</sub>	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	25	A

## Thermal Characteristics

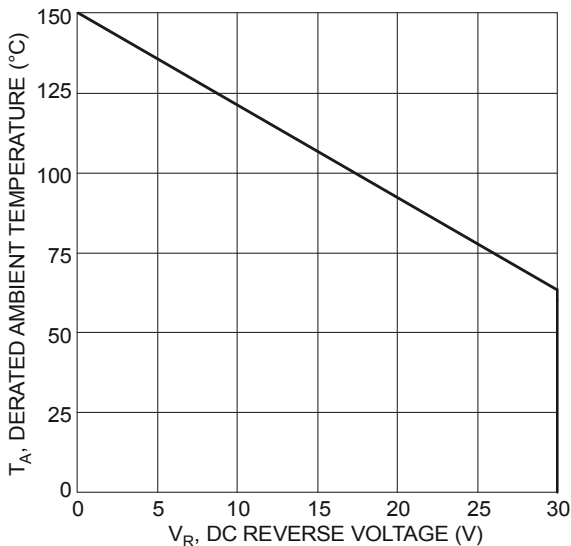
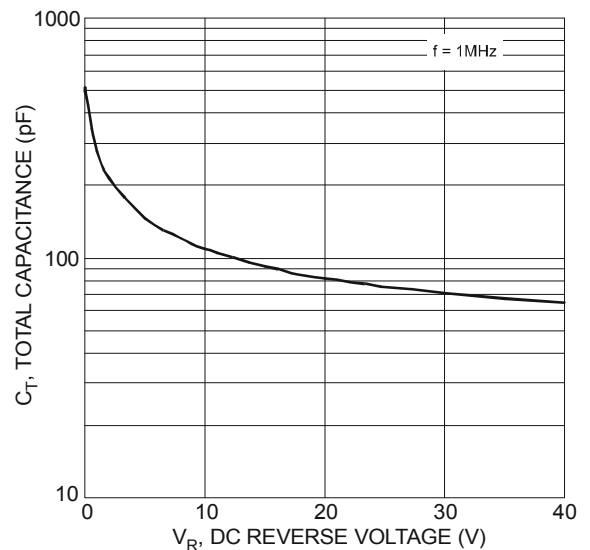
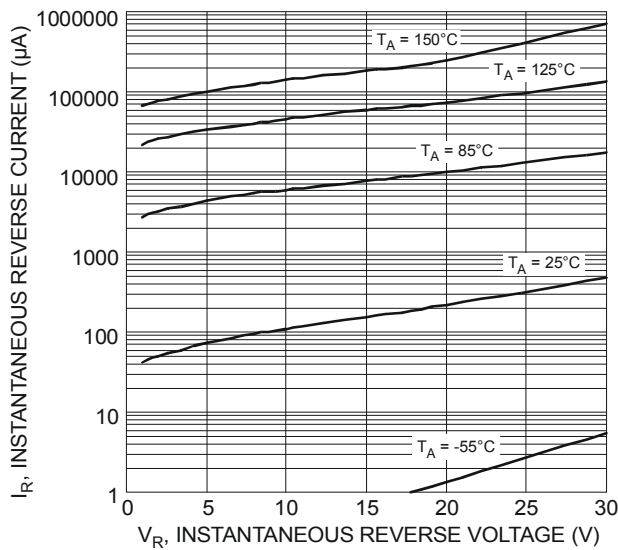
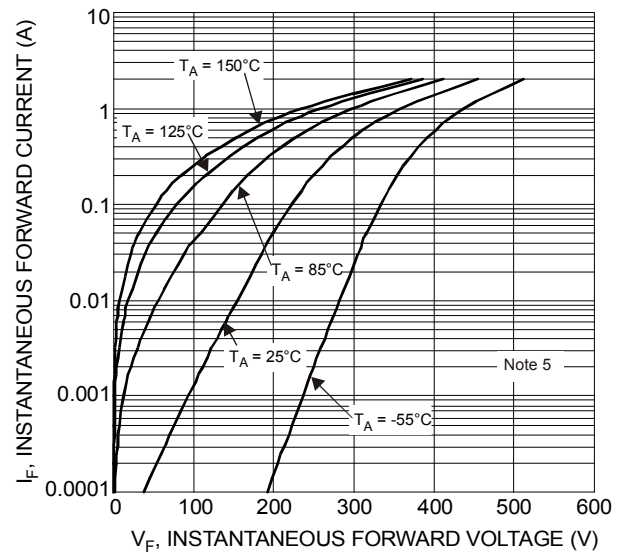
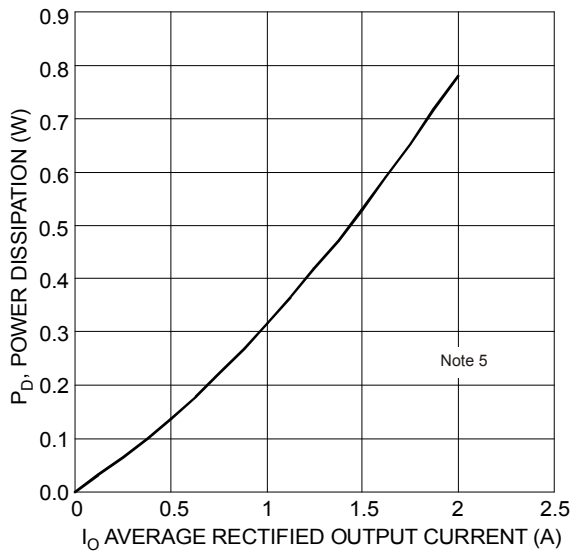
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 5)	R <sub>θJA</sub>	130	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	—	0.35	0.40	V	I <sub>F</sub> = 1.0A, T <sub>J</sub> = +25°C
		—	0.29	—		I <sub>F</sub> = 1.0A, T <sub>J</sub> = +85°C
Leakage Current (Note 6)	I <sub>R</sub>	—	0.47	1.0	mA	V <sub>R</sub> = 30V, T <sub>J</sub> = +25°C
		—	17	—	mA	V <sub>R</sub> = 30V, T <sub>J</sub> = +85°C
Total Capacitance	C <sub>T</sub>	—	150	—	pF	V <sub>R</sub> = 5V, f = 1.0 MHz

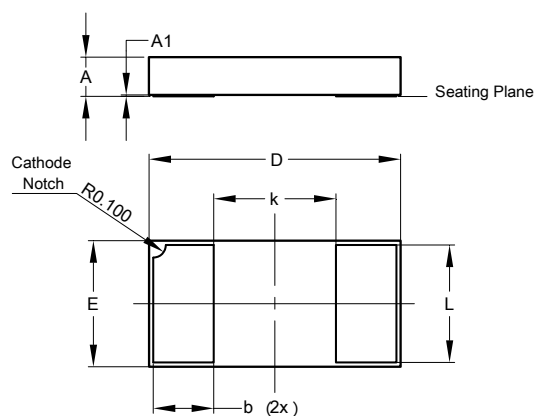
Notes: 5. Device mounted on FR-4 substrate PC board, with minimum recommended pad layout per <http://www.diodes.com/datsheets/ap02001.pdf>.  
6. Short duration pulse test used to minimize self-heating effect.

## Typical Electrical Characteristics



## Package Outline Dimensions

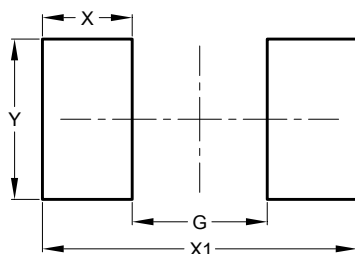
Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for latest version.



X2-WLB2010-2			
Dim	Min	Max	Typ
A	—	0.305	0.290
A1	—	0.02	0.011
b	—	—	0.48
D	1.950	2.050	2.000
E	0.950	1.050	1.000
k	—	—	0.972
L	—	—	0.932
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	0.872
X	0.580
X1	2.032
Y	1.032

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