

Maximum Ratings (@T_A = +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 Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _{RM}	40	V
Average Rectified Output Current (See Figure 1)	I _O	250	mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	5	A

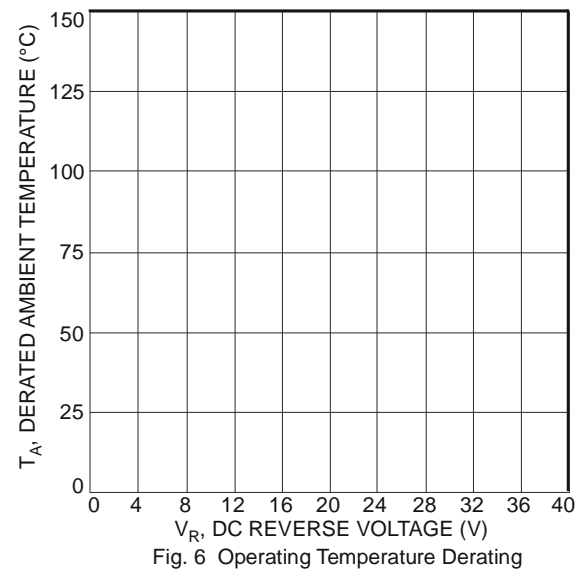
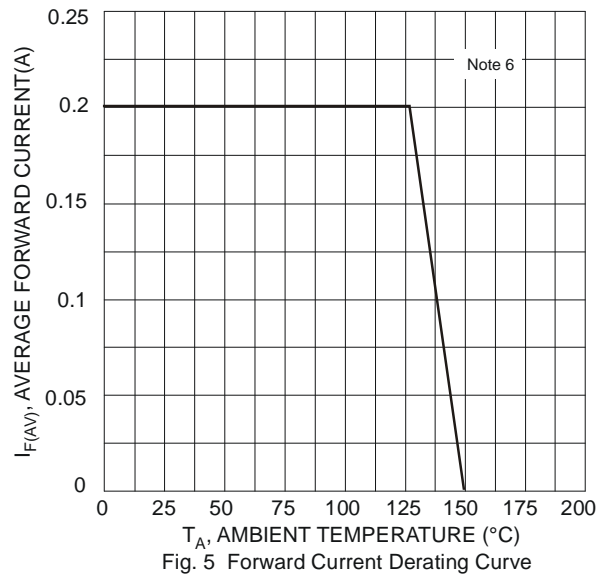
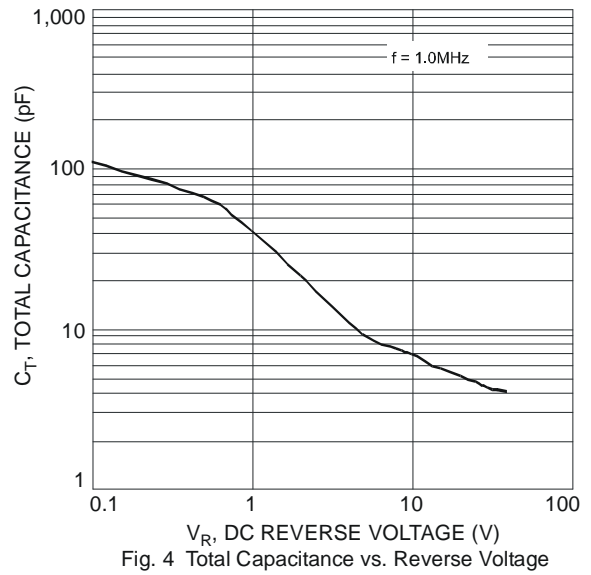
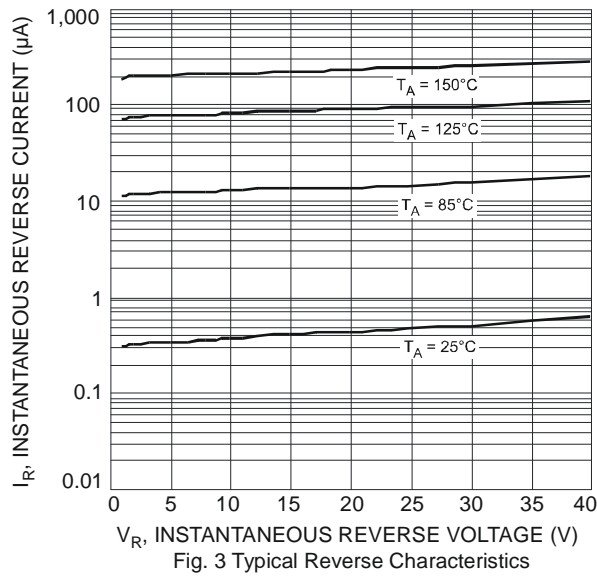
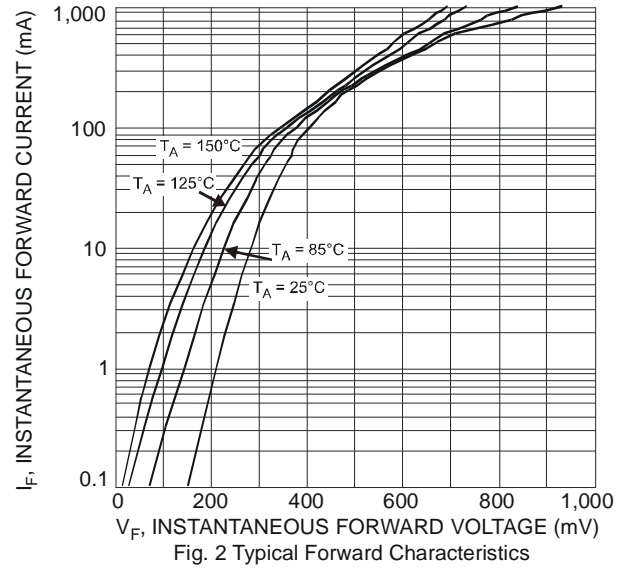
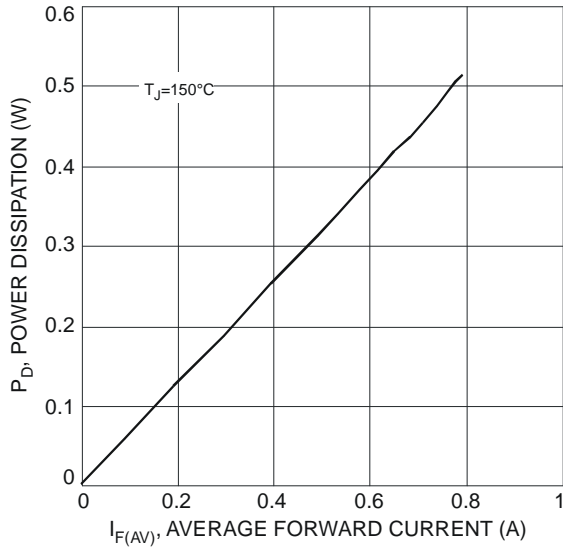
Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient T _A = +25°C (Note 6)	R _{θJA}	270	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

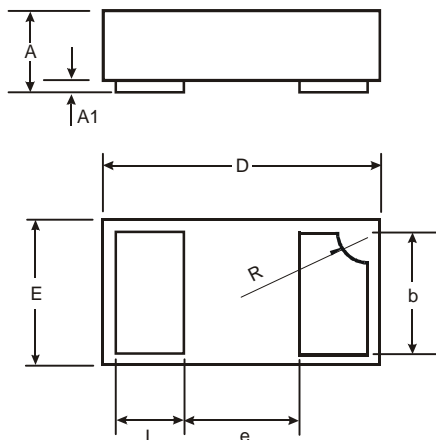
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V _F	-	0.15	0.21	V	I _F = 0.1mA, T _J = +25°C
		-	0.22	0.28		I _F = 1.0mA, T _J = +25°C
		-	0.29	0.35		I _F = 10mA, T _J = +25°C
		-	0.41	0.49		I _F = 100mA, T _J = +25°C
		-	0.49	0.59		I _F = 200mA, T _J = +25°C
		-	0.47	0.56		I _F = 200mA, T _J = +125°C
Leakage Current (Note 5)	I _R	-	0.5 0.6	- 10	μA	V _R = 25V, T _J = +25°C V _R = 40V, T _J = +25°C

Notes: 5. Short duration pulse test used to minimize self-heating effect.
6. FR-4 PCB, 2oz. Copper, minimum recommended pad layout per <http://www.diodes.com/datasheets/ap02001.pdf>.



Package Outline Dimensions

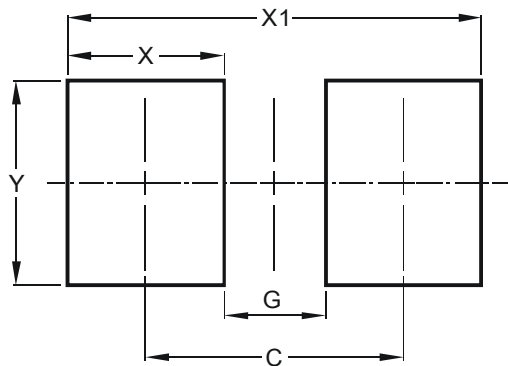
Please see AP02001 at http://www.diodes.com/_files/datasheets/ap02001.pdf for the latest version.



X1-DFN1006-2			
Dim	Min	Max	Typ
A	0.47	0.53	0.50
A1	0	0.05	0.03
b	0.45	0.55	0.50
D	0.95	1.075	1.00
E	0.55	0.675	0.60
e	-	-	0.40
L	0.20	0.30	0.25
R	0.05	0.15	0.10
All Dimensions in mm			

Suggested Pad Layout

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



Dimensions	Value (in mm)
C	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

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