

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

Characteristic	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V <sub>RM</sub>	45	V
Reverse Voltage	V <sub>R</sub>	40	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Average Forward Current	I <sub>O</sub>	100	mA
Maximum (Peak) Forward Current	I <sub>FM</sub>	300	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 10ms	I <sub>FSM</sub>	1	A

**Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Power Dissipation	P <sub>D</sub>	250	mW
Thermal Resistance, Junction to Ambient Air	R <sub>θJA</sub>	400	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-40 to +125	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 5)	V <sub>(BR)R</sub>	30	—	—	V	I <sub>R</sub> = 100μA
Forward Voltage Drop	V <sub>F</sub>	—	280	—	mV	I <sub>F</sub> = 1.0mA
			360	—		I <sub>F</sub> = 15mA
			470	550		I <sub>F</sub> = 50mA
			580	800		I <sub>F</sub> = 100mA
Reverse Current (Note 5)	I <sub>R</sub>	—	—	1.0	μA	V <sub>R</sub> = 25V
Total Capacitance	C <sub>T</sub>	—	7	15	pF	V <sub>R</sub> = 10V, f = 1.0 MHz

Notes: 5. Short duration pulse test used to minimize self-heating effect.

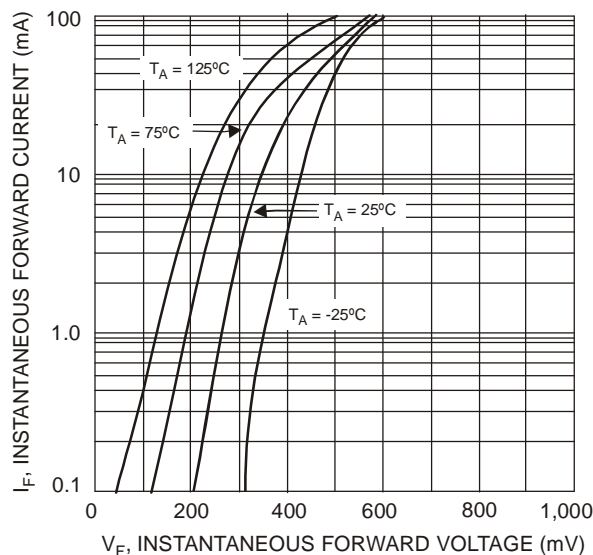


Fig. 1 Typical Forward Characteristics

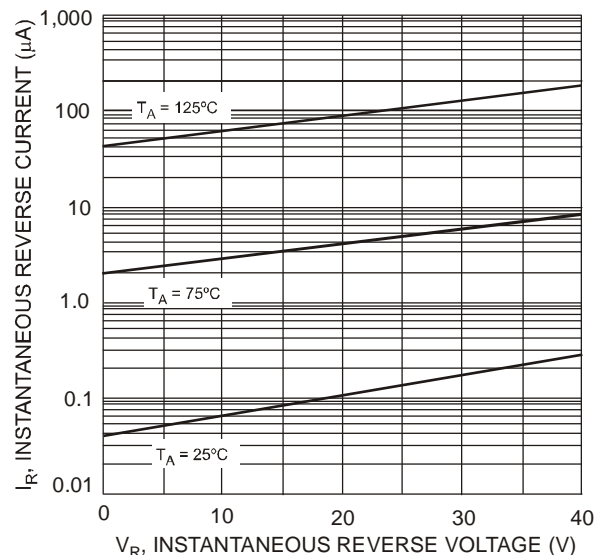
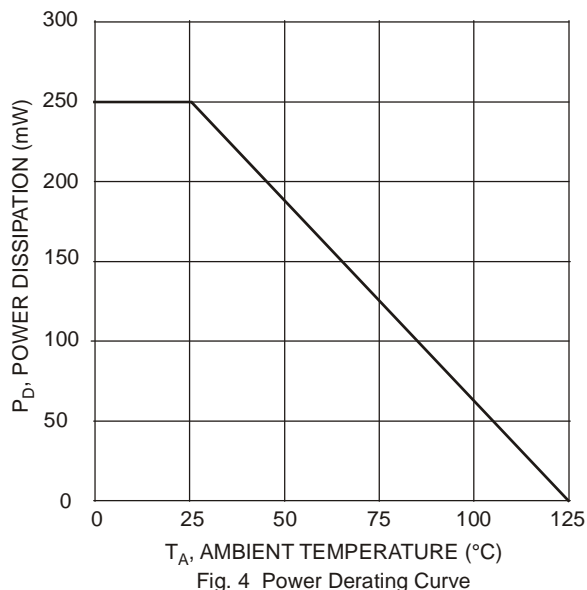
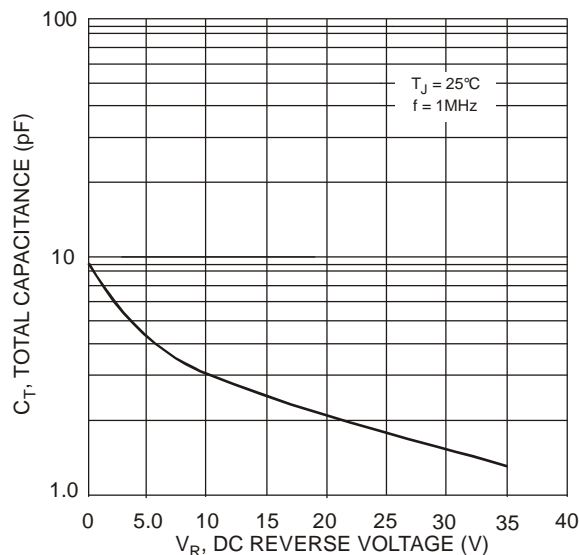
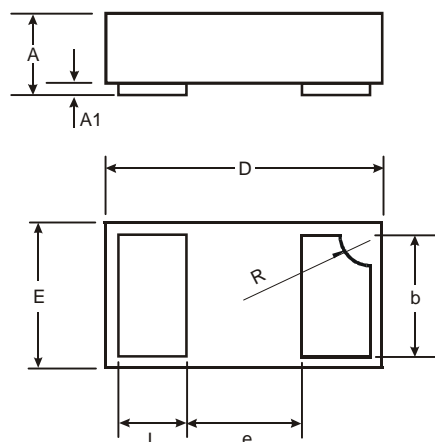


Fig. 2 Typical Reverse Characteristics



## Package Outline Dimensions

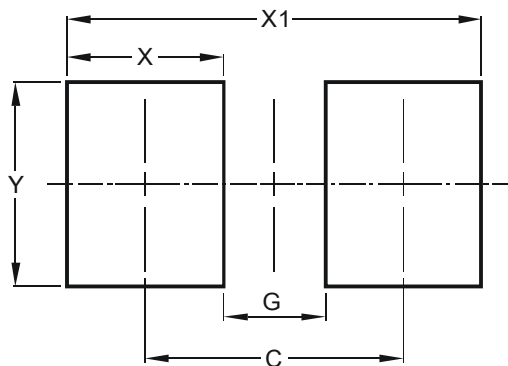
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X1-DFN1006-2			
Dim	Min	Max	Typ
A	0.47	0.53	0.50
A1	0	0.05	0.03
b	0.45	0.55	0.50
D	0.95	1.075	1.00
E	0.55	0.675	0.60
e	-	-	0.40
L	0.20	0.30	0.25
R	0.05	0.15	0.10
All Dimensions in mm			

## Suggested Pad Layout

Please see AP02001 at [http://www.diodes.com/\\_files/datasheets/ap02001.pdf](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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