

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

Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive 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>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	70	V
Average Rectified Output Current	I <sub>O</sub>	500	mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Per Diode)	I <sub>FSM</sub>	8	A

## Thermal Characteristics

Characteristic	Symbol	Typ	Max	Unit
Power Dissipation (Note 5)	P <sub>D</sub>	-	0.56	W
Thermal Resistance Junction to Ambient Air (Note 5)	R <sub>θJA</sub>	-	222	°C/W
Thermal Resistance Junction to Ambient Air (Note 6)	R <sub>θJA</sub>	-	149	°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
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	100	-	-	V	I <sub>R</sub> = 250μA
Forward Voltage (Per Diode)	V <sub>F</sub>	-	0.54 0.67 0.56	0.60 0.73 0.63	V	I <sub>F</sub> = 0.25A, T <sub>J</sub> = +25°C I <sub>F</sub> = 0.5A, T <sub>J</sub> = +25°C I <sub>F</sub> = 0.5A, T <sub>J</sub> = +125°C
Reverse Current (Note 7) (Per Diode)	I <sub>R</sub>	-	0.3 32	25 250	μA	V <sub>R</sub> = 100V, T <sub>J</sub> = +25°C V <sub>R</sub> = 100V, T <sub>J</sub> = +125°C

Notes: 5. FR-4 PCB, 2 oz. copper, minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.  
 6. Polyimide PCB, 2 oz. copper; minimum recommended pad layout per <http://www.diodes.com/package-outlines.html>.  
 7. Short duration pulse test used to minimize self-heating effect.

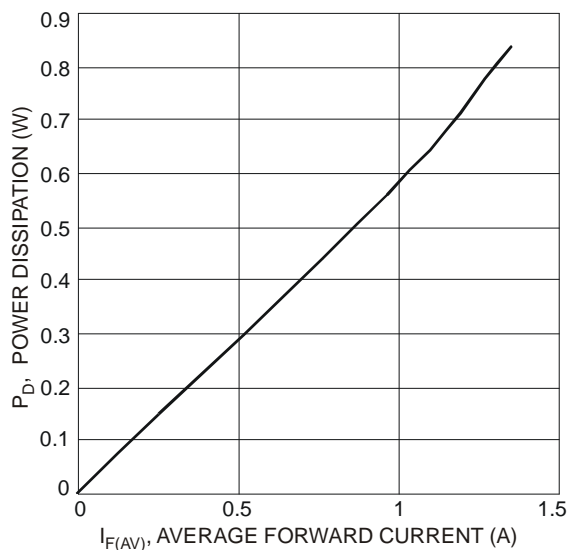


Fig. 1 Forward Power Dissipation

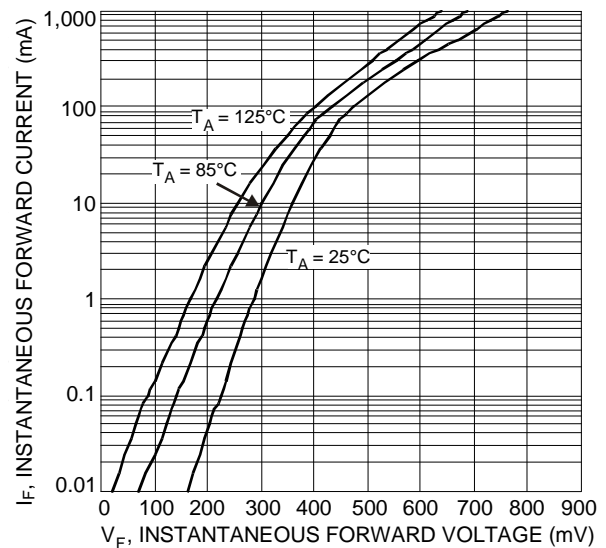
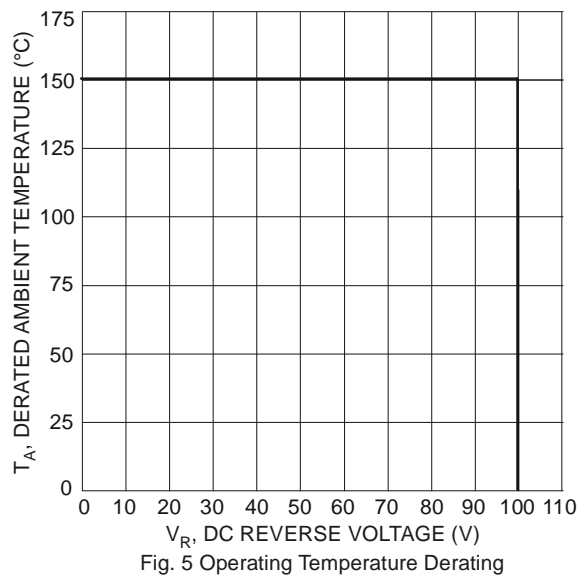
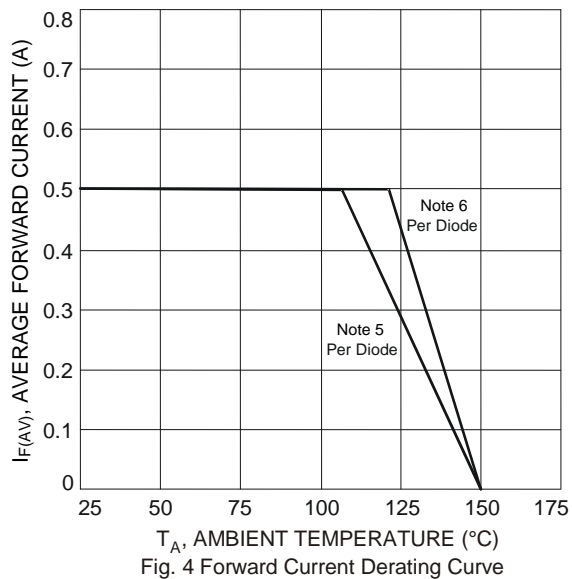
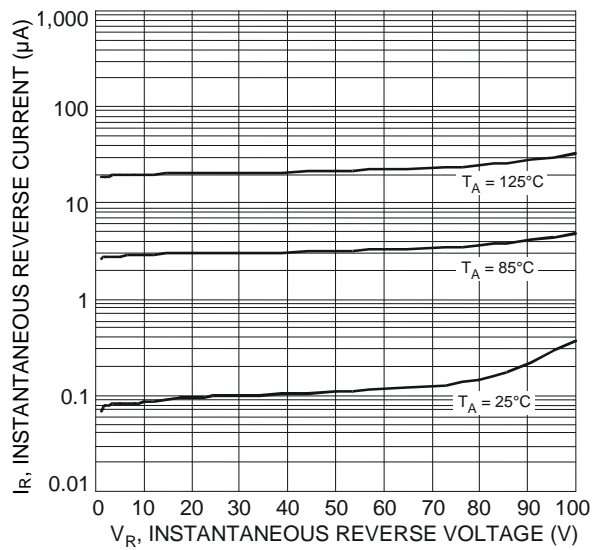


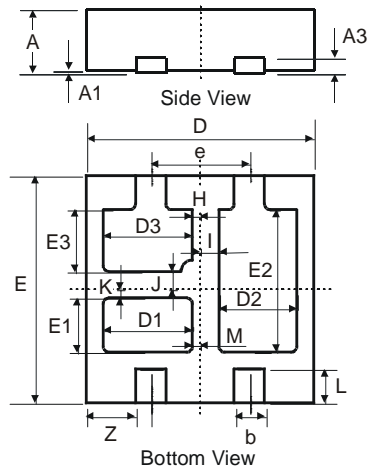
Fig. 2 Typical Forward Characteristics



## Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### U-DFN3030-4

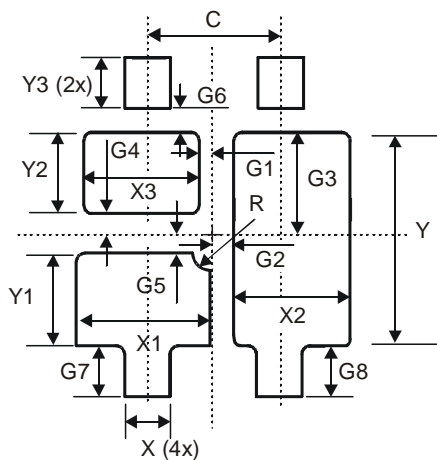


U-DFN3030-4							
Dim	Min	Max	Typ	Dim	Min	Max	Typ
A	0.57	0.63	0.60	E1	0.615	0.815	0.715
A1	0	0.05	0.02	E2	1.78	1.98	1.88
A3	-	-	0.15	E3	0.715	0.915	0.815
B	0.35	0.45	0.40	H	0.05	0.15	0.10
D	2.90	3.10	3.00	I	0.20	0.30	0.25
D1	1.075	1.275	1.175	J	0.185	0.285	0.235
D2	0.925	1.125	1.025	K	0.065	0.165	0.115
D3	1.075	1.275	1.175	L	0.30	0.60	0.45
E	2.90	3.10	3.00	M	0.05	0.15	0.10
e	-	-	1.30	Z	-	-	0.65
All Dimensions in mm							

## Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

### U-DFN3030-4



Dimensions	Value (in mm)
C	1.300
G1	0.100
G2	0.150
G3	0.830
G4	0.115
G5	0.135
G6	0.170
G7	0.500
G8	0.500
R	0.150
X	0.500
X1	1.375
X2	1.225
X3	1.175
Y	1.980
Y1	1.015
Y2	0.715
Y3	0.650

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