

Maximum Ratings (@T_A = +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 _{RRM}	130	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _{RM}		
RMS Reverse Voltage	V _{R(RMS)}	92	V
Average Rectified Output Current	I _O	4	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	40	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Maximum Thermal Resistance Junction to Ambient	R _{θJA}	55	°C/W
(Note 5) (Note 6)		180	
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
Reverse Breakdown Voltage (Note 7)	V _{(BR)R}	130	—	—	V	I _R = 0.1mA
Forward Voltage	V _F	—	0.68	0.75	V	I _F = 4A, T _J = +25°C
		—	0.55	0.62		I _F = 4A, T _J = +125°C
		—	—	0.88		I _F = 10A, T _J = +25°C
Reverse Current (Note 7)	I _R	—	18	100	μA	V _R = 130V, T _J = +25°C
		—	2.5	20	mA	V _R = 130V, T _J = +125°C

Notes: 5. Device mounted on Polyimide Substrate, 140mm² copper pad, double sided, PC board.
6. Device mounted on FR-4 Substrate, 1" x 1", 2oz. Copper, single-sided PC board.
7. Short duration pulse test used to minimize self-heating effect.

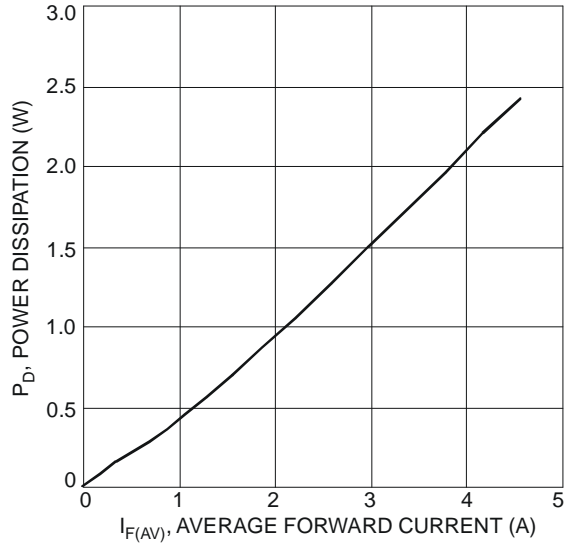


Figure 1 Forward Power Dissipation

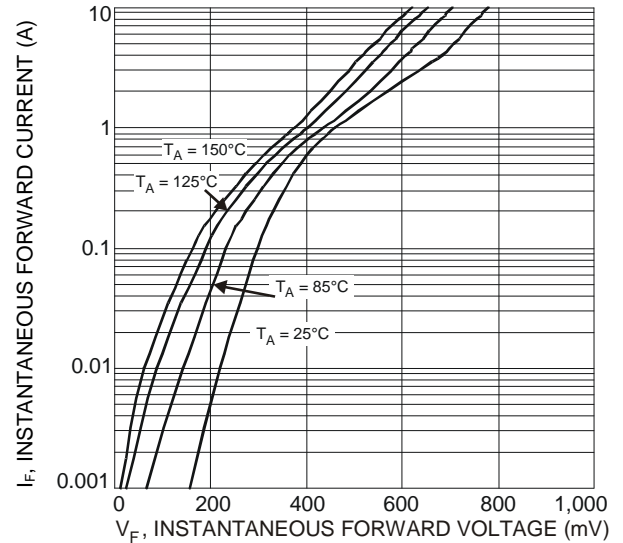


Figure 2 Typical Forward Characteristics

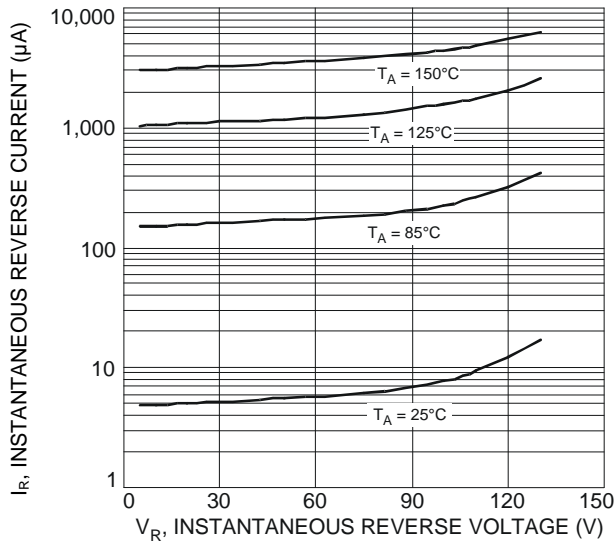


Figure 3 Typical Reverse Characteristics

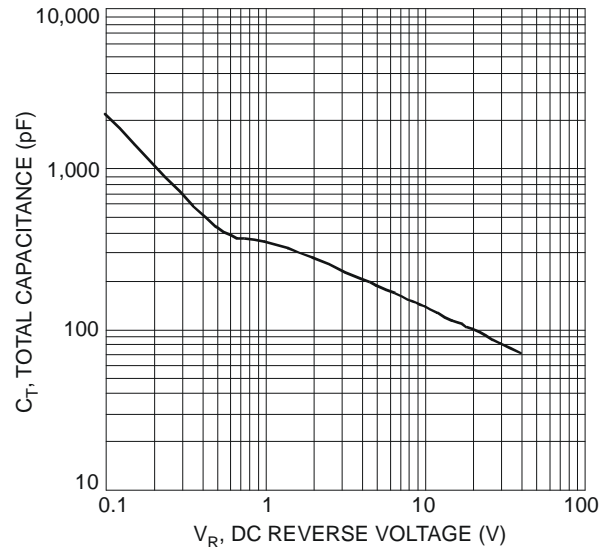


Figure 4 Total Capacitance vs. Reverse Voltage

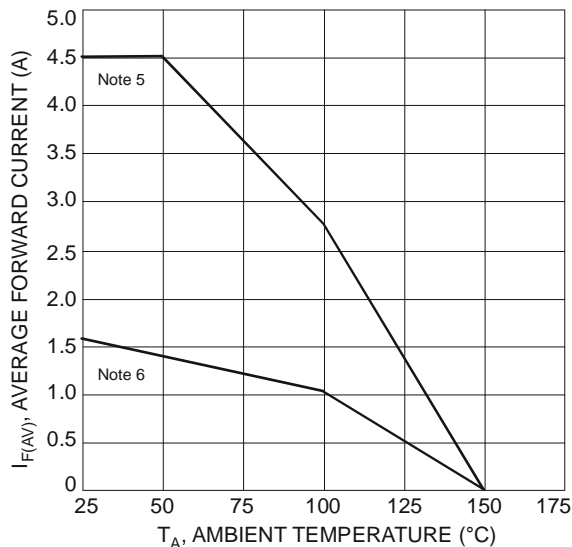


Figure 5 Forward Current Derating Curve

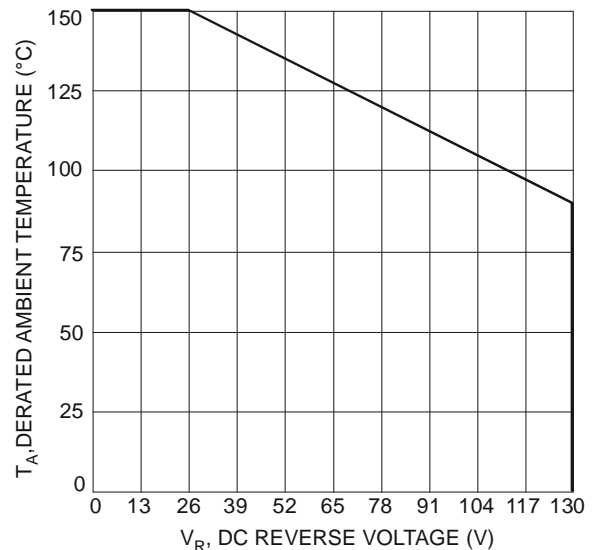
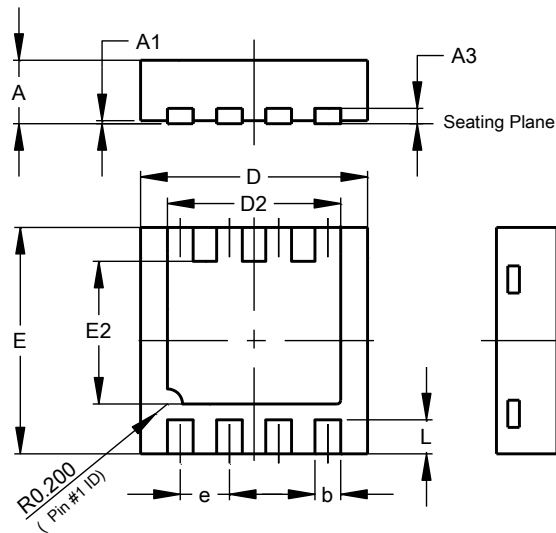


Figure 6 Operating Temperature Derating

Package Outline Dimensions

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

U-DFN3030-8

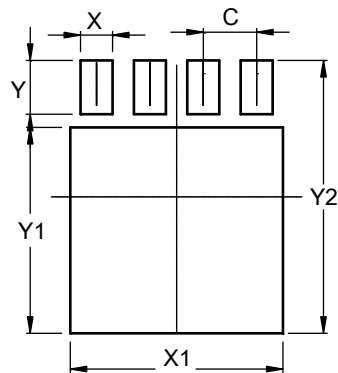


U-DFN3030-8			
Dim	Min	Max	Typ
A	0.57	0.63	0.60
A1	0	0.05	0.02
A3	-	-	0.15
b	0.29	0.39	0.34
D	2.90	3.10	3.00
D2	2.19	2.39	2.29
e	-	-	0.65
E	2.90	3.10	3.00
E2	1.64	1.84	1.74
L	0.30	0.60	0.45
All Dimensions in mm			

Suggested Pad Layout

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

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Dimensions	Value (in mm)
C	0.650
X	0.390
X1	2.590
Y	0.650
Y1	2.490
Y2	3.300

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