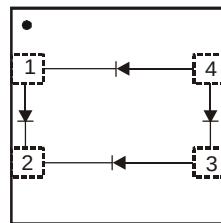


Features

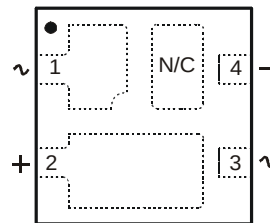
- Ultra Low Leakage Current
- Excellent High Temperature Stability
- Patented Super Barrier Rectifier Technology
- Soft, Fast Switching Capability
- 150°C Operating Junction Temperature
- **Lead Free Finish, RoHS Compliant (Note 1)**
- **“Green” Device (Note 3)**

Mechanical Data

- Case: DFN3030-4
- Case Material: Molded Plastic “Green” Molding Compound, UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish – NiPdAu Over Copper Lead Frame, Solderable per MIL-STD-202, Method 208 **e3**
- Polarity: See Diagram
- Marking Information: See Page 3
- Ordering Information: See Page 3
- Weight: 0.02 grams (approximate)



Top View
Device Schematic



Top View
Pin Configuration

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	V _{RRM}	60	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _{RM}		
Average Rectified Output Current	I _O	500	mA
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Per Diode)	I _{FSM}	8	A

Thermal Characteristics

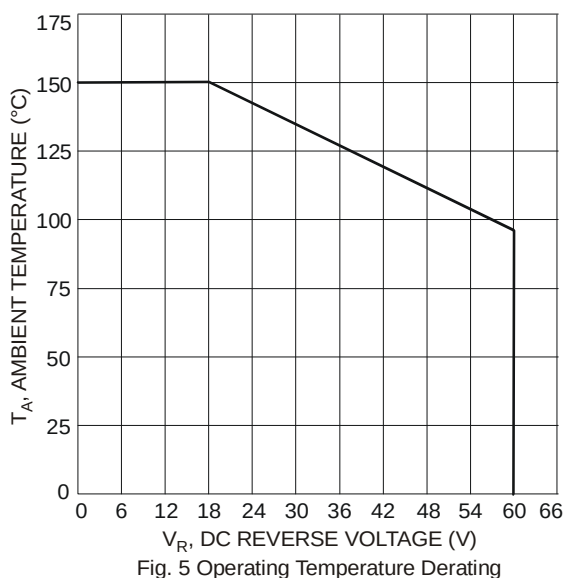
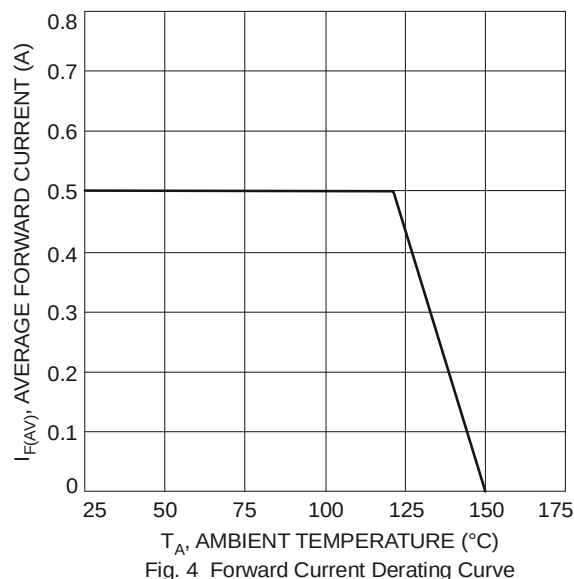
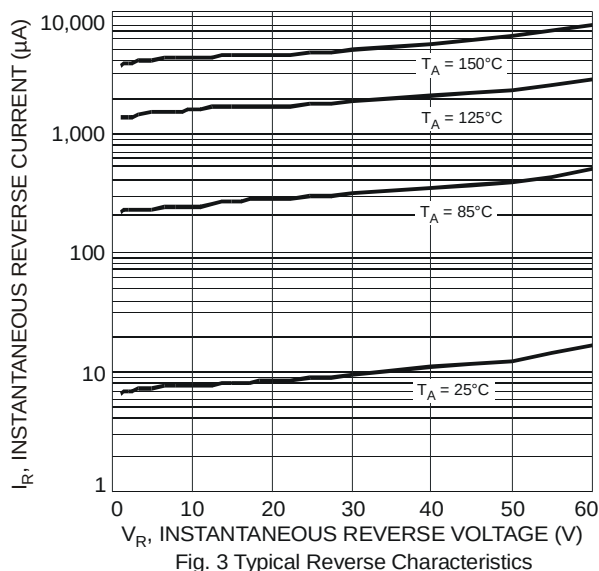
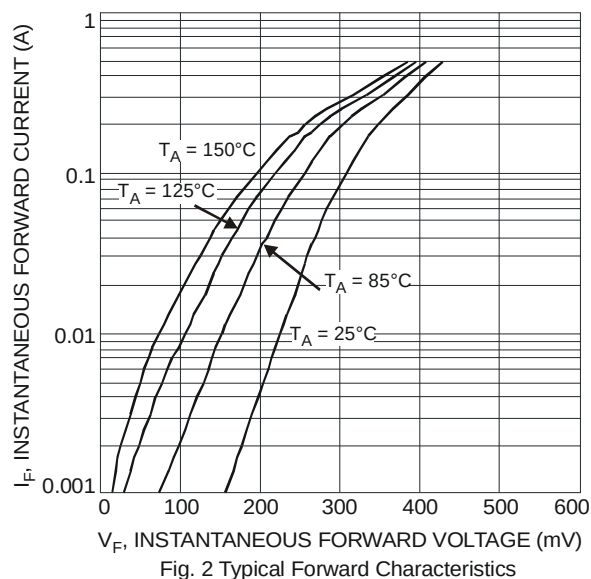
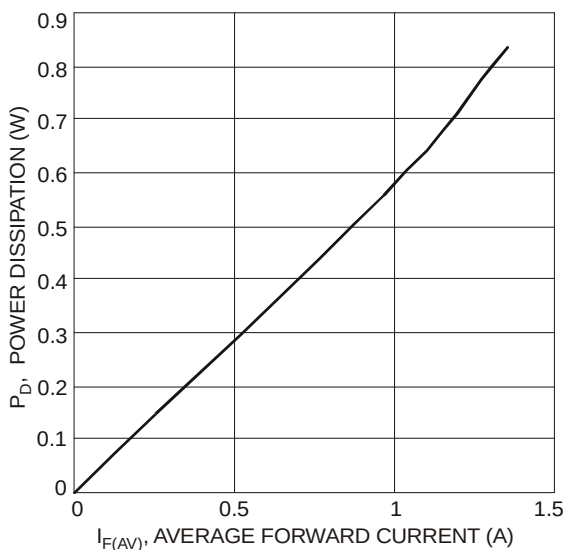
Characteristic	Symbol	Typ	Max	Unit
Thermal Resistance Junction to Ambient Air (Note 2)	R _{θJA}	215	-	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150		°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage (Per Diode)	V _F	-	- 0.43 0.40	0.42 0.49 0.46	V	I _F = 0.25A, T _J = 25°C I _F = 0.5A, T _J = 25°C I _F = 0.5A, T _J = 125°C
Reverse Current (Note 4) (Per Diode)	I _R	-	17 2.8	100 20	μA mA	V _R = 60V, T _J = 25°C V _R = 60V, T _J = 125°C

- Notes:
1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes.
 2. Polyimide PCB, 2 oz. copper; minimum recommended pad layout per <http://www.diodes.com/datasheets/ap02001.pdf>.
 3. Diodes Inc.'s “Green” policy can be found on our website at http://www.diodes.com/products/lead_free/index.php
 4. Short duration pulse test used to minimize self-heating effect.

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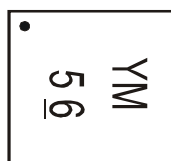
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Ordering Information (Note 5)

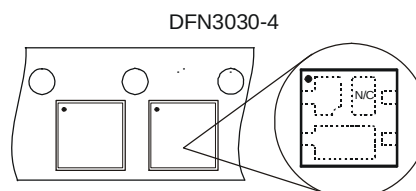
Part Number	Case	Packaging
SBR05M60BLP-7	DFN3030-4	3000/Tape & Reel

Notes: 5. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



56 = Product Type Marking Code
 YM = Date Code Marking
 Y = Year (ex: W = 2009)
 M = Month (ex: 9 = September)

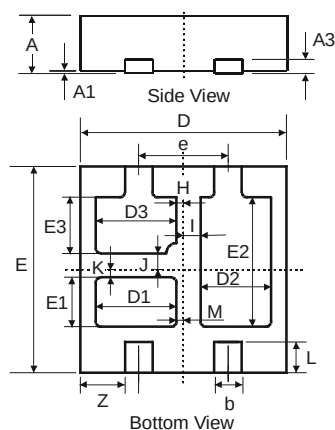


Date Code Key

Year	2009	2010	2011	2012	2013	2014	2015
Code	W	X	Y	Z	A	B	C

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

Package Outline Dimensions



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

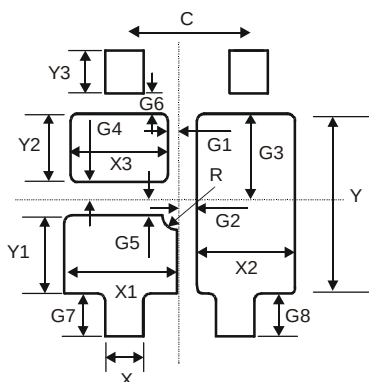
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Suggested Pad Layout



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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2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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