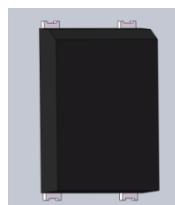


Product Summary (@T_A = +25°C)

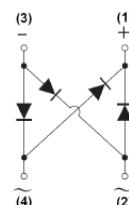
V _{RRM} (V)	I _O (A)	V _{FM} (V)	I _R (μA)
1000,800,600, 400,200,100	1.5	1.3	5

Description and Applications

Suitable for AC to DC bridge full wave rectification for SMPS, LED lighting, adapter, battery charger, home appliances, office equipment, and telecommunication applications.



Top View



Internal Schematic

Ordering Information (Note 4)

Part Number	Compliance	Case	Packaging
RDBF1510U-13	Commercial	DBF	3,000/Tape & Reel
RDBF158U-13	Commercial	DBF	3,000/Tape & Reel
RDBF156U-13	Commercial	DBF	3,000/Tape & Reel
RDBF154U-13	Commercial	DBF	3,000/Tape & Reel
RDBF152U-13	Commercial	DBF	3,000/Tape & Reel
RDBF151U-13	Commercial	DBF	3,000/Tape & Reel

Notes:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

Marking Information



RDBF15x(x)U = Product Type Marking Code

DII = Manufacturers' Code Marking

YMD = Date Code Marking

Y = Last Digit of Year (ex: 8 = 2018)

M = See Month/Code Table Below

D = Day 1~9 = 1~9; Day 10~31 = A~V

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

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

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

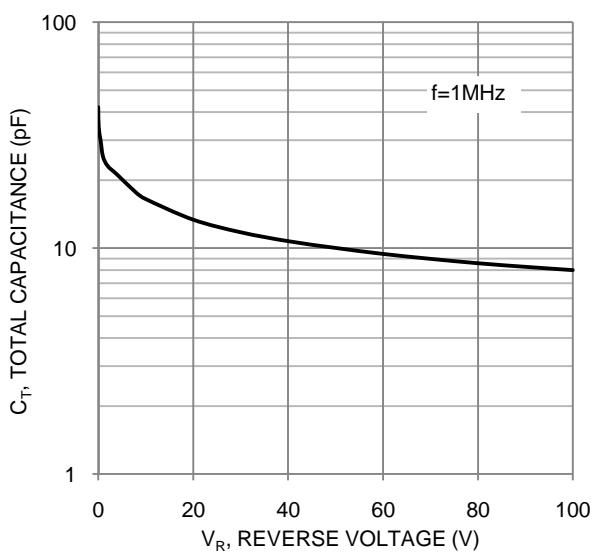
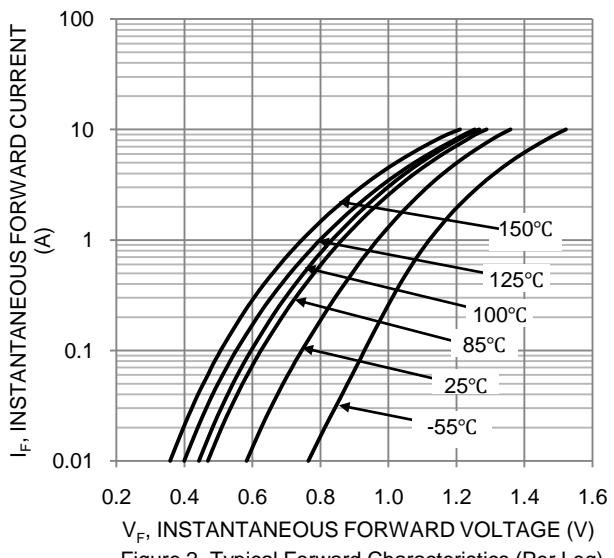
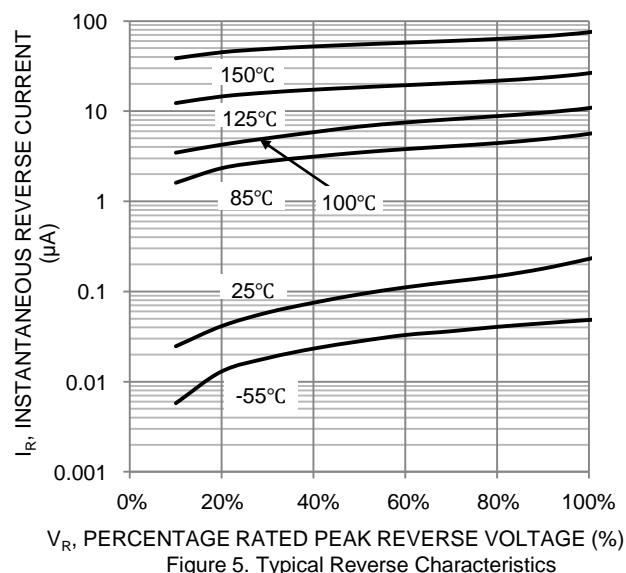
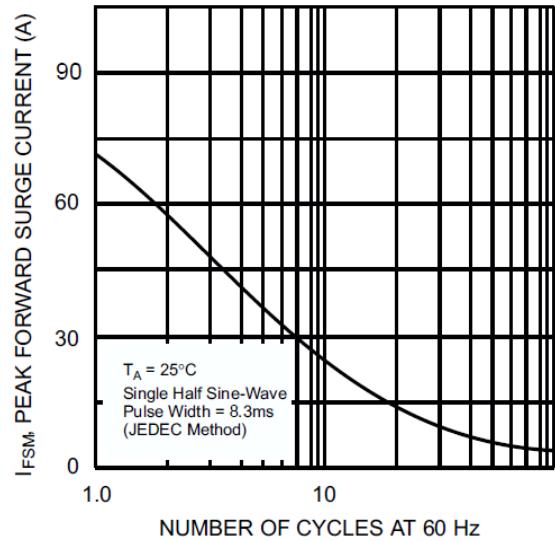
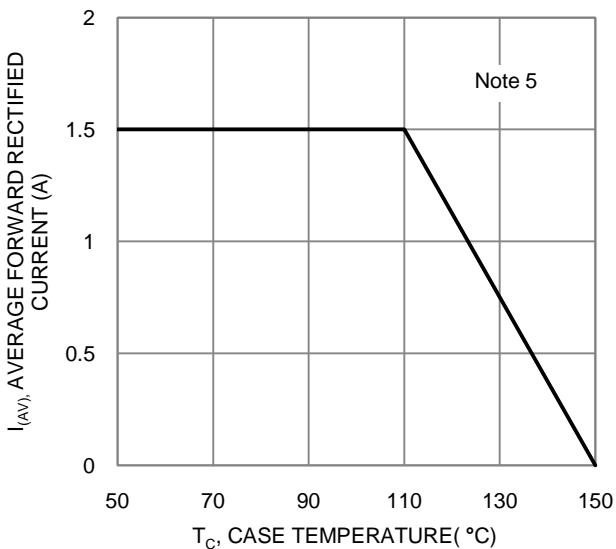
Characteristic	Symbol	RDBF151U	RDBF152U	RDBF154U	RDBF156U	RDBF158U	RDBF1510U	Unit
Peak Repetitive Reverse Voltage	V _{RRM}							
Working Peak Reverse Voltage	V _{RWM}	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R							
RMS Reverse Voltage	V _{R(RMS)}	70	140	280	420	560	700	V
Average Rectified Output Current (Note 5) @ T _C = +110°C	I _O			1.5				A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}			70				A
I ² t Rating for Fusing (1ms < t < 8.3ms)	I ² t			20.33				A ² S
Maximum Forward Voltage (Per Element) @ I _F =1.5A	V _{FM}			1.3				V
Maximum Reverse Recovery Time (Note 7)	t _{RR}		150		250		500	ns
Peak Reverse Current @ T _A =+25°C At Rated DC Blocking Voltage @ T _A =+125°C	I _R			5.0				μA
Typical Total Capacitance (Per Element) (Note 8)	C _T			25				pF

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 6) (Per Element)	R _{θJA}	50	°C/W
Typical Thermal Resistance, Junction to Case (Per Element)	R _{θJC}	10	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

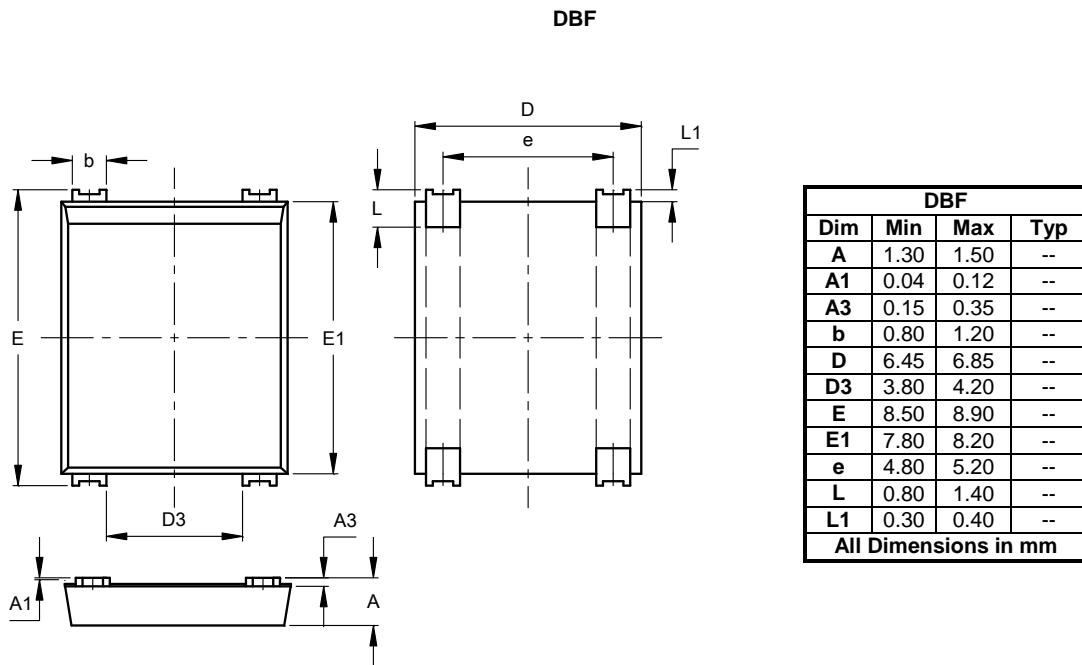
Notes:

5. Device mounted on glass epoxy PC board with 1.3mm² solder pad.
6. Device mounted on glass epoxy substrate with 1oz/ft², 15mmx15mm copper pad per pin.
7. Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
8. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.



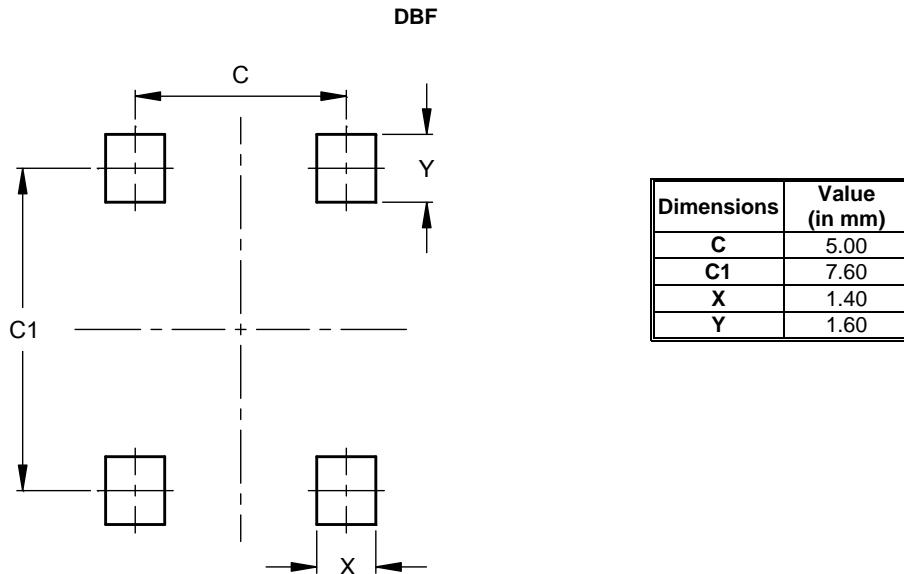
Package Outline Dimensions

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



Suggested Pad Layout

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



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