



**THE DATASHEET OF  
DSRHD08-13**



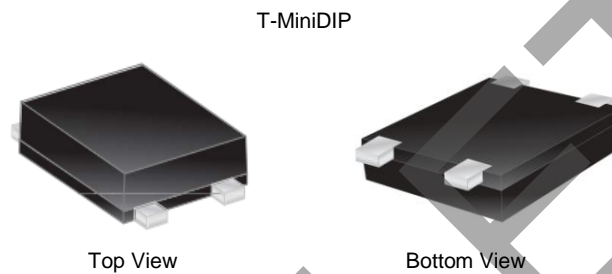
OBSOLETE – PART DISCONTINUED

### Features

- Glass Passivated Bridge Rectifier
- Excellent High Temperature Stability
- 150°C Operating Junction Temperature
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

### Mechanical Data

- Case: T-MiniDIP
- Case Material: Molded Plastic "Green" Molding Compound, UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish – Matte Tin over Copper Lead Frame, Solderable per MIL-STD-202, Method 208 @3
- Polarity: See Diagram
- Weight: 0.092 grams (approximate)



### Ordering Information (Note 4)

Part Number	Case	Packaging
DSRHD02-13	T-MiniDIP	5000/Tape & Reel
DSRHD04-13	T-MiniDIP	5000/Tape & Reel
DSRHD06-13	T-MiniDIP	5000/Tape & Reel
DSRHD08-13	T-MiniDIP	5000/Tape & Reel

- Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
  2. See <http://www.diodes.com> 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 <http://www.diodes.com>.

### Marking Information



Dxx = Product Type Marking Code

- 12 = 200V
- 14 = 400V
- 16 = 600V
- 18 = 800V

D ::= Manufacturers' Code Marking

YWW = Date Code Marking

Y = Last Digit of Year (ex: 2 = 2012)

WW = Week Code (01 ~ 53)

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

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

Characteristic	Symbol	DSRHD02	DSRHD04	DSRHD06	DSRHD08	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>					
Working Peak Reverse Voltage	V <sub>RWM</sub>	200	400	600	800	V
DC Blocking Voltage	V <sub>RM</sub>					
Average Rectified Output Current	I <sub>O</sub>	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms	I <sub>FSM</sub>	30				A
Single Half Sine-Wave Superimposed on Rated Load (Per Diode)						
Minimum Fusing Current Rating (t < 8.3 ms)	I <sup>2</sup> t	3.73				A <sup>2</sup> s

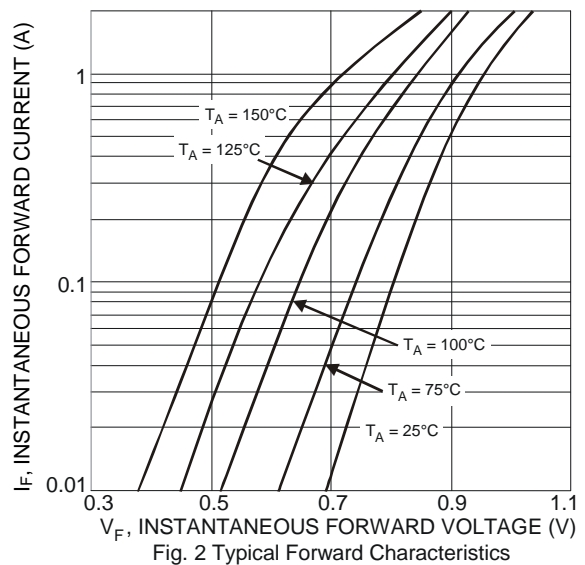
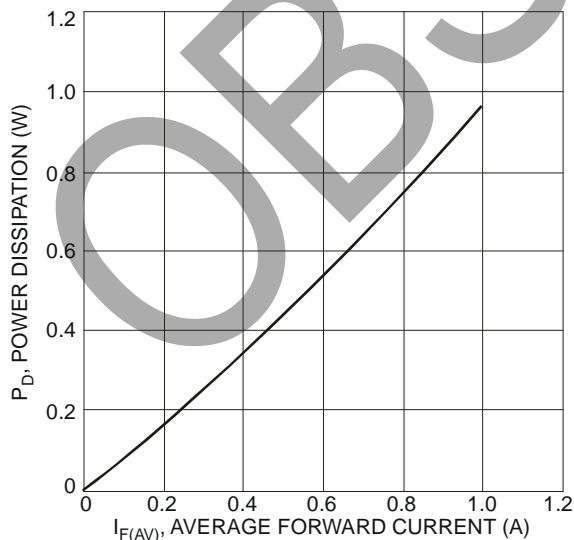
**Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Lead	R <sub>θJL</sub>	25	°C/W
Typical Thermal Resistance Junction to Ambient	On Aluminum Substrate	62.5	°C/W
	On Glass-Epoxy Substrate	80	
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

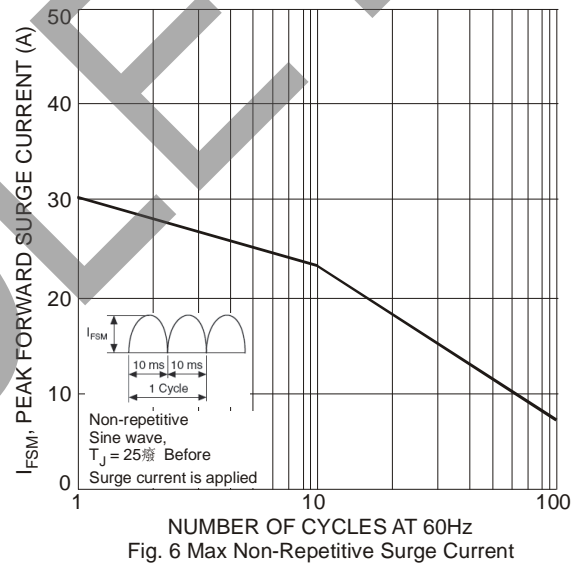
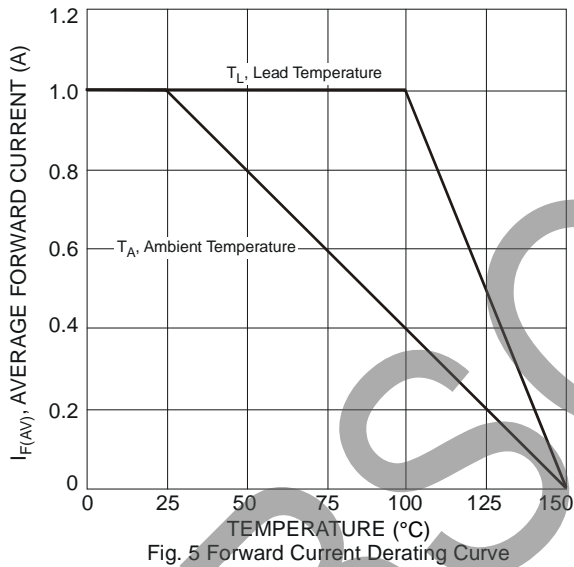
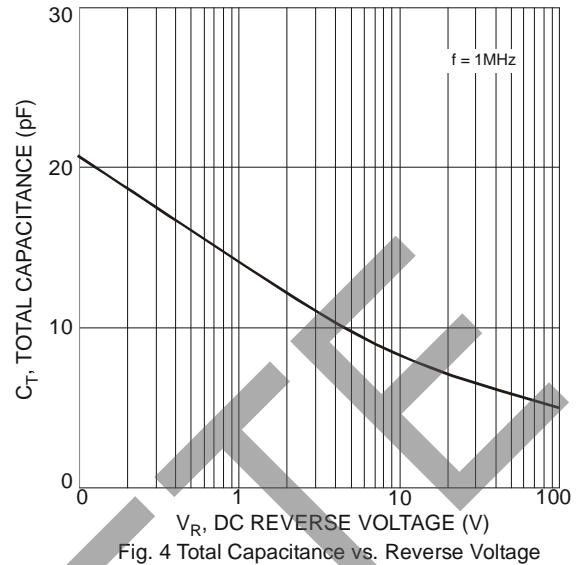
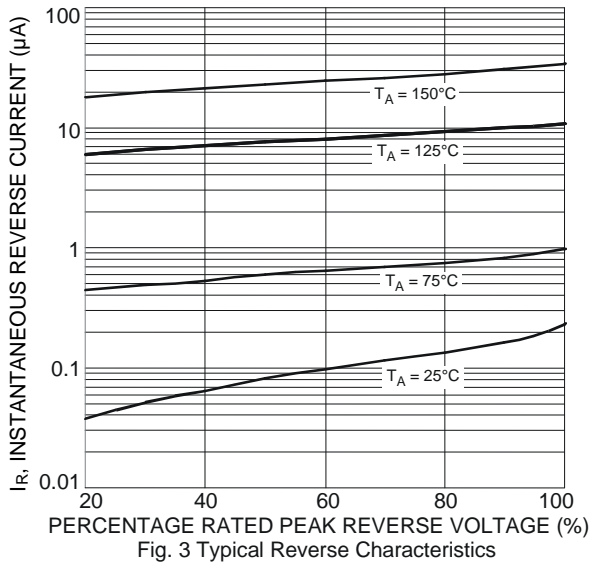
**Electrical Characteristics** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Max	Unit	Test Condition
Forward Voltage (Per Diode)	V <sub>F</sub>	0.95	V	I <sub>F</sub> = 0.4A, T <sub>J</sub> = +25°C
		1.1		I <sub>F</sub> = 1.0A, T <sub>J</sub> = +25°C
Reverse Current (Note 5) (Per Diode) V <sub>R</sub> = Rated Block Voltage	I <sub>R</sub>	10 150	μA	V <sub>R</sub> = Rated Block Voltage, T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C

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

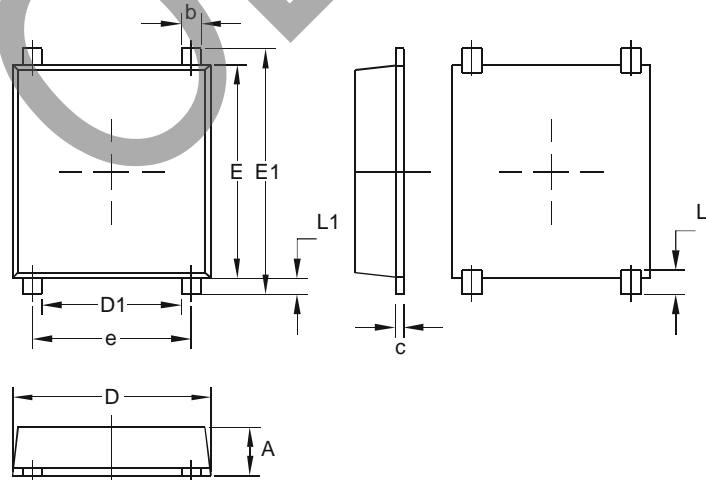


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**Package Outline Dimensions**

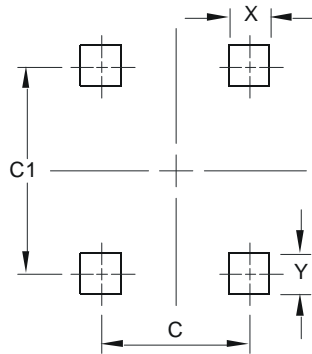
Please see <http://www.diodes.com/package-outlines.html> for the latest version.



T-MiniDIP		
Dim	Min	Max
A	1.15	1.27
b	0.60	0.70
c	0.15	0.25
D	4.90	5.10
D1	3.20	3.50
E	5.30	5.50
E1	6.00	6.40
e	3.90	4.10
L	0.25	0.80
L1	0.25	0.55
<b>All Dimensions in mm</b>		

**Suggested Pad Layout**

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



Dimensions	Value (in mm)
C	4.00
C1	5.60
X	0.75
Y	0.85

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