

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China













## 1.0A DSR BRIDGE DIODESTAR RECTIFIER

#### **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)

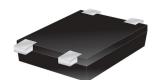
#### **Mechanical Data**

- 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)

#### T-MiniDIP







**Bottom View** 

## 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**



 $\underline{D}xx = Product Type Marking Code$ 

12 = 200V

14 = 400V

16 = 600V

18 = 800V

O'!! = 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 Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>RM</sub>	200	400	600	800	٧
Average Rectified Output Current	I <sub>O</sub>		1	.0		Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (Per Diode)	I <sub>FSM</sub>	30			Α	
Minimum Fusing Current Rating (t < 8.3 ms)	l <sup>2</sup> t		3.	73		A <sup>2</sup> s

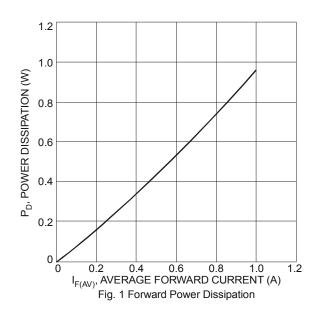
## **Thermal Characteristics**

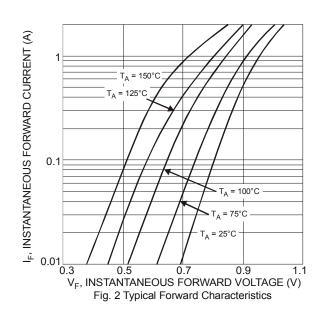
Characteristic		Symbol	Value	Unit
Typical Thermal Resistance Junction to Lead		$R_{ hetaJL}$	25	°C/W
Typical Thermal Resistance Junction to Ambient	On Aluminum Substrate On Glass-Epoxy Substrate	$R_{ heta JA}$	62.5 80	°C/W
Operating and Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-55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

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

Characteristic	Symbol	Max	Unit	Test Condition
Forward Voltage (Per Diode)	V <sub>F</sub>	0.95	1 V	$I_F = 0.4A, T_J = +25^{\circ}C$
orward voltage (Fer Diode)		1.1		$I_F = 1.0A, T_J = +25$ °C
Reverse Current (Note 5) (Per Diode) V <sub>R</sub> = Rated Block Voltage	I <sub>R</sub>	10 150	μА	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.

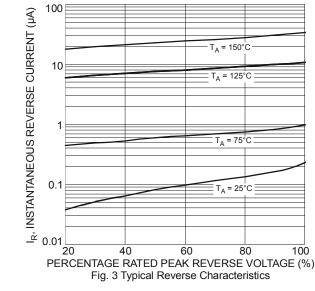


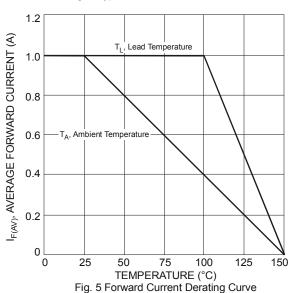


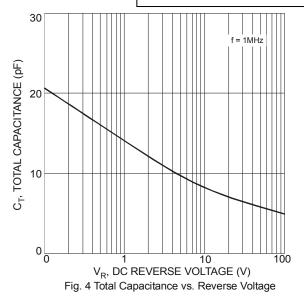


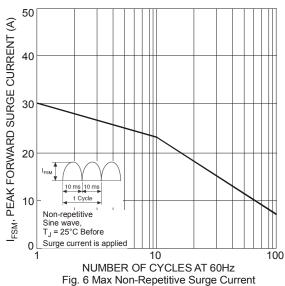


# DSRHD02 - DSRHD08



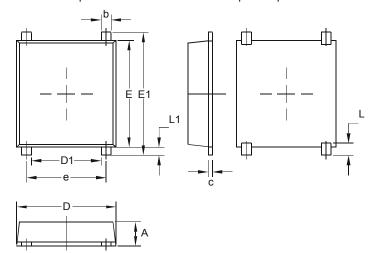






# **Package Outline Dimensions**

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for latest version.



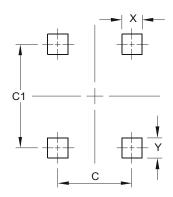
T-MiniDIP				
Dim	Min	Max		
Α	1.15	1.27		
b	0.60	0.70		
С	0.15	0.25		
D	4.90	5.10		
D1	3.20	3.50		
Е	5.30	5.50		
E1	6.00	6.40		
е	3.90	4.10		
L	0.25	0.80		
L1	0.25	0.55		
All Dimensions in mm				





## **Suggested Pad Layout**

Please see AP02001 at http://www.diodes.com/datasheets/ap02001.pdf for the latest version.



Dimensions	Value (in mm)		
С	4.00		
C1	5.60		
Х	0.75		
Υ	0.85		

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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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