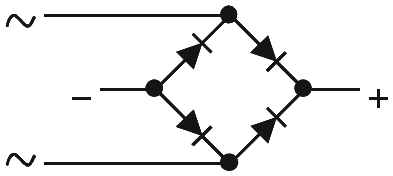
0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features and Benefits

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Miniature Package Saves Space on PC Boards
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish, RoHS Compliant (Note 1)**

Mechanical Data

- Case: MiniDIP
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish — Tin. Plated Leads, Solderable per MIL-STD-202, Method 208 e3
- Polarity: As Marked on Case
- Marking: Type Number, Date Code & Polarity Markings
- Weight: 0.125 grams (approximate)



Equivalent Circuit

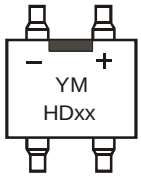
Ordering Information (Note 2)

Device*	Packaging	Shipping
HDxx-T	MiniDIP	3K/Tape & Reel, 13-inch

*xx = Device type, e.g. HD02-T or HD04-T, etc.

Notes: 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes
2. For packaging details, visit our website at http://www.diodes.com.

Marking Information



HDxx = Product Type Marking Code (ex: HD04)
YM = Date Code Marking
Y = Last Digit of the Year
M = See Month/Code Table Below

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 @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	HD01	HD02	HD04	HD06	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RMM} V_{RWM} V_{DC}	100	200	400	600	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	V
Average Forward Rectified Current (Note 3) @T_A = 40°C	I_O	0.8				A
Non-Repetitive Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	30				A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 3)	$R_{\theta JA}$	75	°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	Value	Unit
Instantaneous Voltage Drop @ 0.4A (per element)	V_F	1.0	V
Peak Reverse Current at Rated @T_A = 25°C DC Blocking Voltage (per element) @T_A = 125°C	I_R	5.0 500	μA
Typical Total Capacitance (per element) (Note 4)	C_T	10	pF

Notes: 3. Mounted on PC Board.
4. Measured at 1.0 MHz and applied reverse voltage of 4.0V.

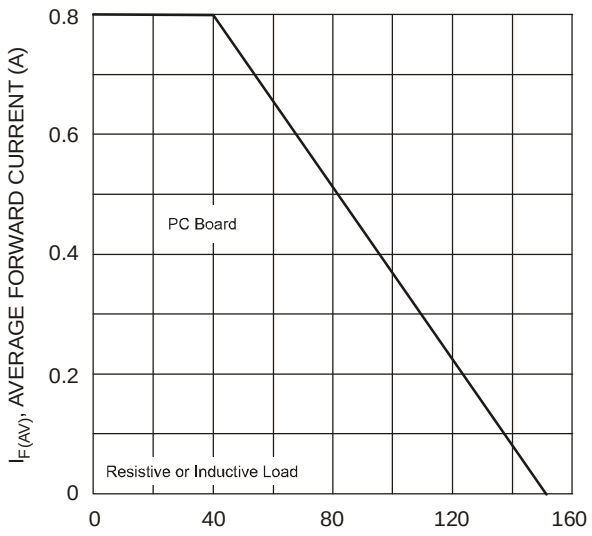


Fig. 1 Output Current Derating Curve

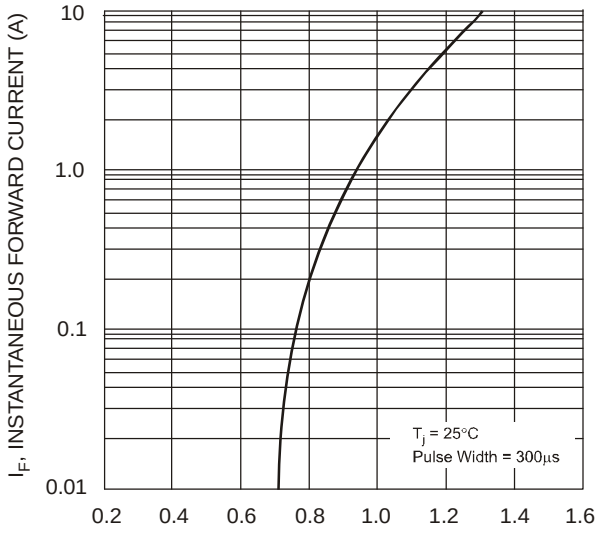


Fig. 2 Typical Forward Characteristics (per element)

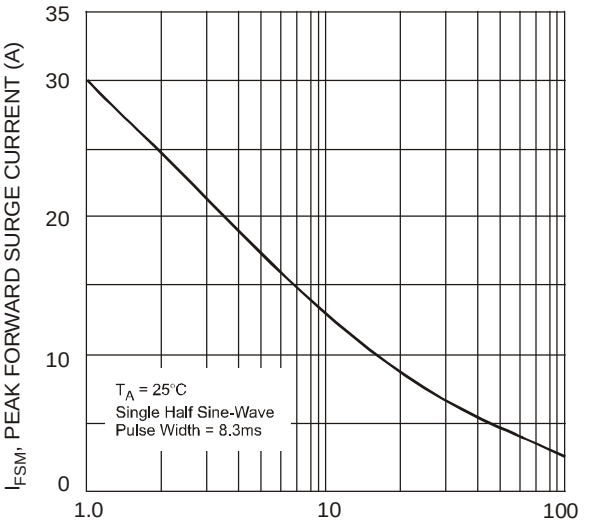


Fig. 3 Maximum Peak Forward Surge Current (per element)

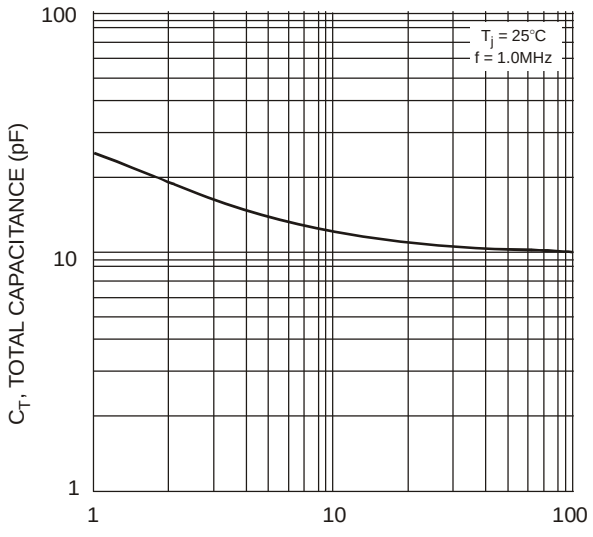


Fig. 4 Typical Total Capacitance (per element)

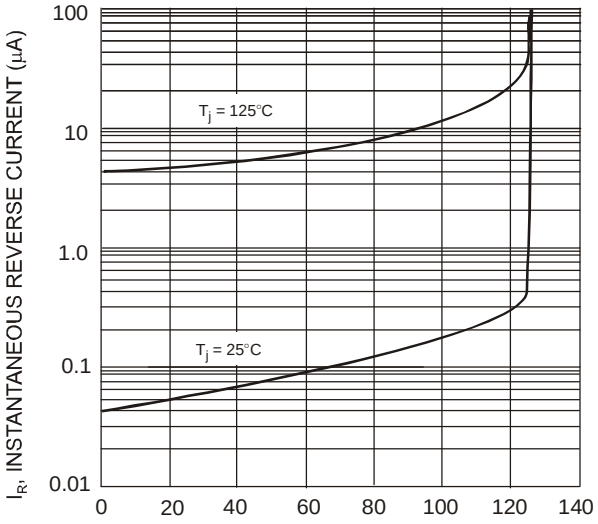
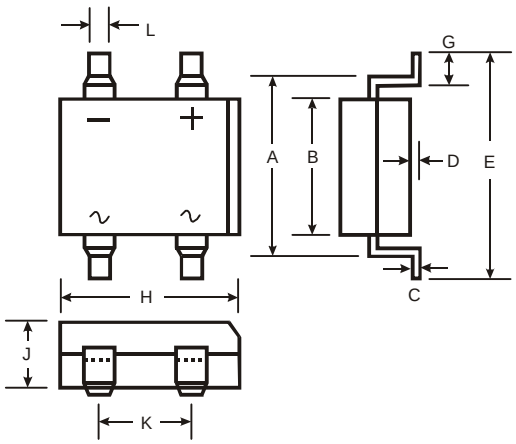


Fig. 5 Typical Reverse Characteristics (per element)

Package Outline Dimensions



MiniDIP		
Dim	**Min**	**Max**
A	5.43	5.75
B	3.6	4.0
C	0.15	0.35
D	0.05	0.20
E	—	7.0
G	0.70	1.10
H	4.5	4.9
J	2.3	2.7
K	2.3	2.7
L	0.50	0.80
All Dimensions in mm		

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