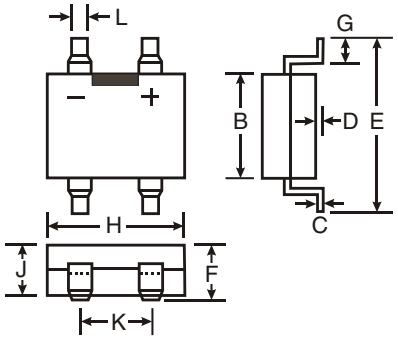
HD01 - HD06

0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

SPICE MODELS: HD01 HD02 HD04 HD06

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automatic Assembly
- Miniature Package Saves Space on PC Boards
- UL Listed Under Recognized Component Index, File Number E94661



MiniDIP		
Dim	**Min**	**Max**
B	3.6	4.0
C	0.15	0.35
D	—	0.20
E	—	7.0
F	—	3.00
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		

Mechanical Data

- Case: MiniDIP, Molded Plastic
- Plastic Material: UL Flammability Classification Rating 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 2026
- Also Available in Lead Free Plating (Matte Tin Finish). Please See Ordering Information, Note 3, on Page 1
- Polarity: As Marked on Case
- Weight: 0.125 grams (approx.)
- Marking: Type Number, Date Code & Polarity Markings

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, 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_{RRM} V_{RWM} V_{DC}	100	200	400	600	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	V
Average Forward Rectified Current (Note 1) 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 (JEDEC method)	I_{FSM}	30				A
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 Junction Capacitance (per element) (Note 2)	C_j	10				pF
Typical Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	75				°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150				°C

Notes: 1. Mounted on Ceramic PC Board.
2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 V.
3. For lead free terminal plating part number, please add "-F" suffix to part number above. Example: HD01-T-F.

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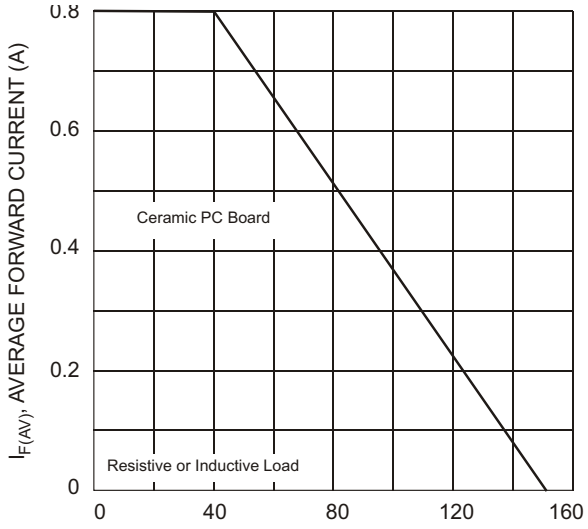

Fig. 1 Output Current Derating Curve

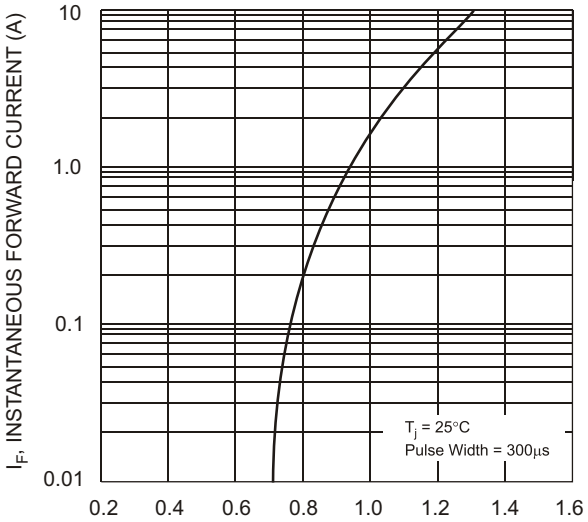

Fig. 2 Typical Forward Characteristics (per leg)

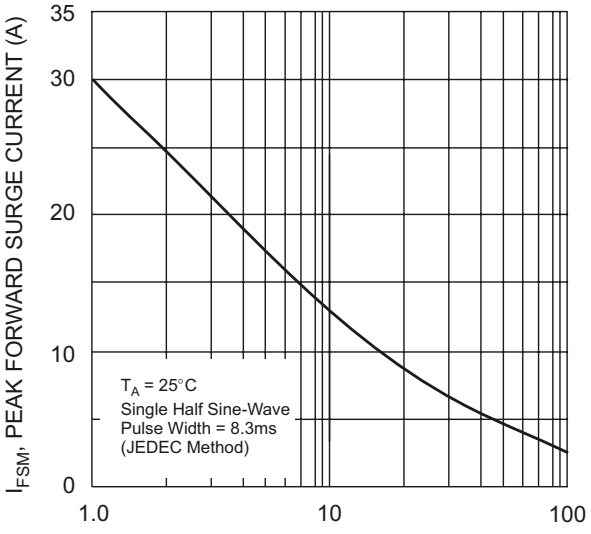

Fig. 3 Maximum Peak Forward Surge Current (per leg)

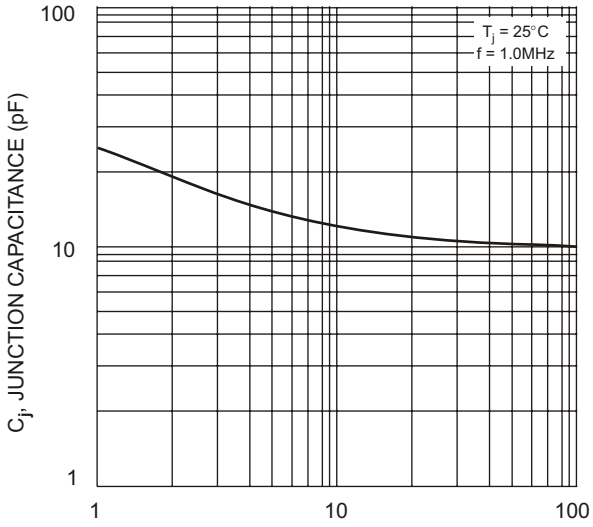

Fig. 4 Typical Junction Capacitance

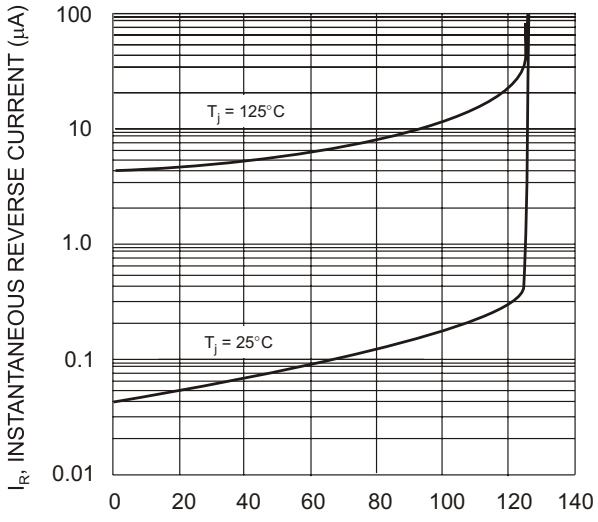

Fig. 5 Typical Reverse Characteristics (per element)