

# Surface Mount Bridge Rectifier

## HD01-G THRU HD10-G (RoHS Device)

Voltage Range 100 to 1000 V  
Current 0.8 Ampere

### Features

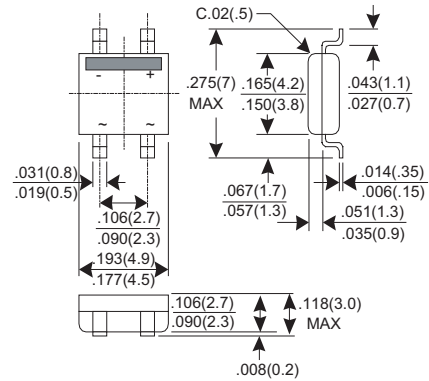
- ★ Plastic package has Underwriters Laboratory Flammability Classification 94V-0

- ★ High surge current capability
- ★ Saves space on printed circuit boards
- ★ Glass passivated structure

### Mechanical Data

- ★ Case: Molded plastic body over passivated junctions
- ★ Terminals: Solderable per MIL-STD-750, method 2026
- ★ Polarity: As marked on body
- ★ Mounting position: Any
- ★ Weight: 0.22 gram

### MINI-DIP



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

CHARACTERISTIC	SYMBOL	HD01-G	HD02-G	HD04-G	HD06-G	HD08-G	HD10-G	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current TA=40°C	IAV	0.8						A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	30						A
Maximum Instantaneous Forward Voltage @ 0.8 A	VF	1.0						V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	5.0 250						uA uA
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	5						A <sup>2</sup> S
Typical junction Capacitance (Note 1)	CJ	25						pF
Typical Thermal Resistance (Note 2)	RθJA	85						°C/W
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to + 150						°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.  
(2) Thermal Resistance from junction to ambient mounted on P.C.B with 0.5 x 0.5"(13x13mm) copper pads.

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### RATINGS AND CHARACTERISTIC CURVES B1S-G THRU B10S-G

FIG.1 - FORWARD CURRENT DERATING CURVE

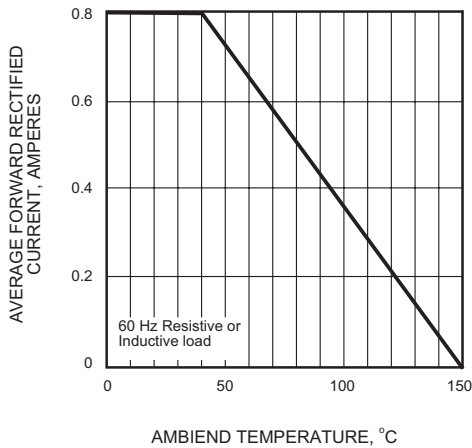


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

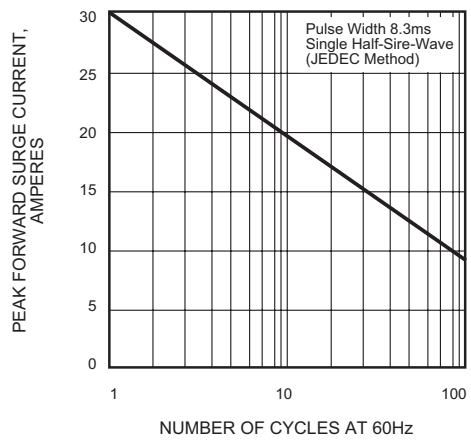


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

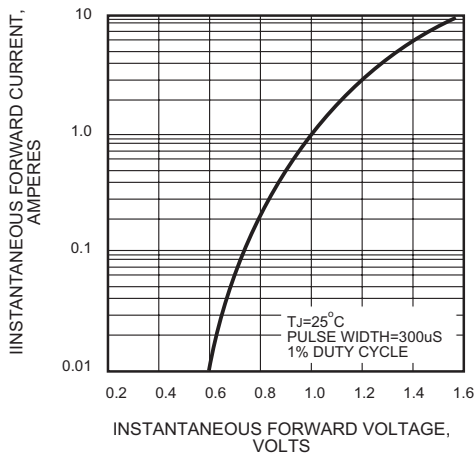


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

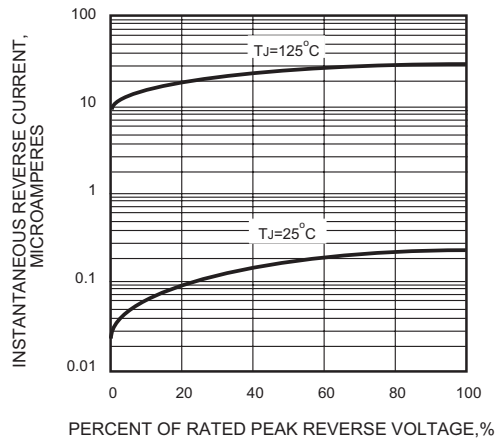


FIG.5 - TYPICAL JUNCTION CAPACITANCE

