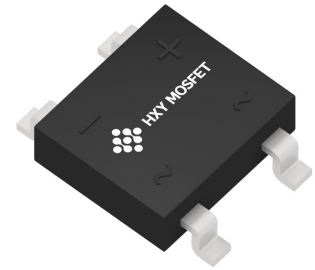


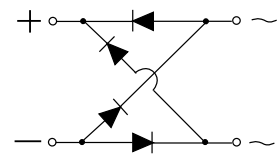


## Features

- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded plastic technique
- \* High surge current capability
- \* Polarity: marked on body
- \* Mounting position: Any
- \* Weight: 1.0 grams



DBS  
(DF-S)



Internal Structure

## Package Marking and Ordering Information

| Product ID | Pack      | Marking | Qty(PCS) |
|------------|-----------|---------|----------|
| HDF1510ST  | DBS(DF-S) | D151ZB  | 1500     |

## Maximum Ratings (Ta=25°C unless otherwise noted)

| Type Number   | HDF1510ST  | Units |
|---|------------|-------|
| Maximum Recurrent Peak Reverse Voltage  | 1000       | V     |
| Maximum RMS Voltage   | 700        | V     |
| Maximum DC Blocking Voltage   | 1000       | V     |
| Maximum Average Forward Rectified Current<br>.375"(9.5mm) Lead Length at Ta=40°C                      | 1.5        | A     |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | 60         | A     |
| Typical thermal resistance<br>ROJA<br>ROJL  | 40<br>15   | °C/W  |
| Operating Temperature Range, Tj   | -55 — +150 | °C    |
| Storage Temperature Range, Tstg   | -55 — +150 | °C    |

## Electrical Characteristics(at TA=25°C unless otherwise noted)

| Characteristics   |             | Symbol         | HDF1510ST | Units |
|---|-------------|----------------|-----------|-------|
| Maximum Forward Voltage Drop per Bridge Element at<br>1.5A DC       |             | V <sub>F</sub> | 1.1       | Volts |
| Maximum Reverse Current at rated<br>DC Blocking Voltage per element | @TA = 25°C  | I <sub>R</sub> | 5.0       | uAmps |
|   | @TA = 125°C |                | 0.5       | mAmps |



## Typical Characteristics

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

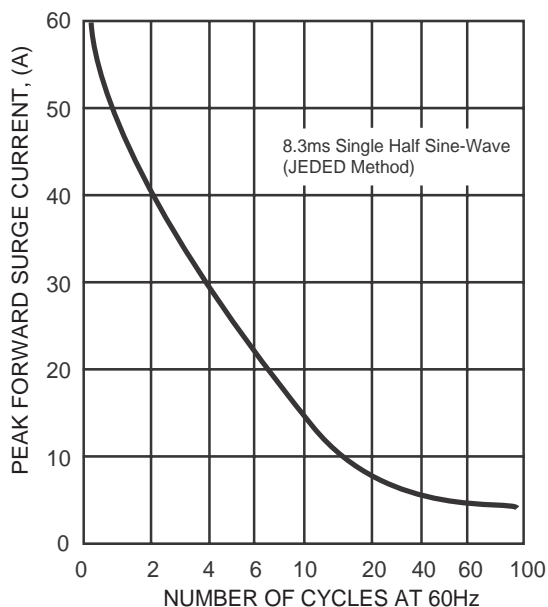


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

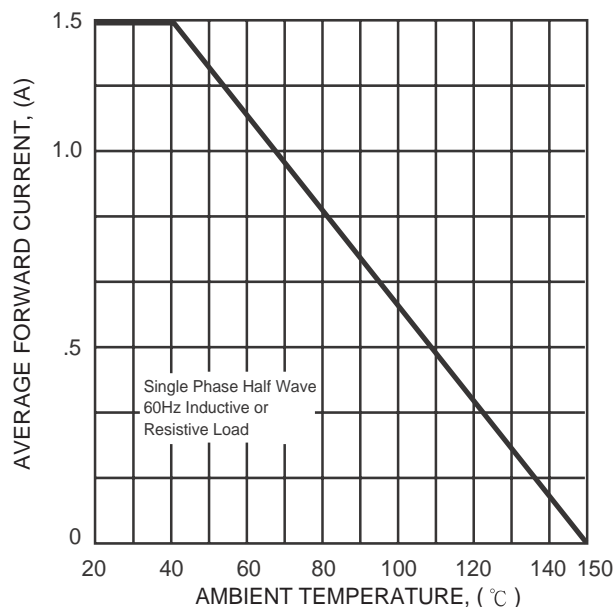


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

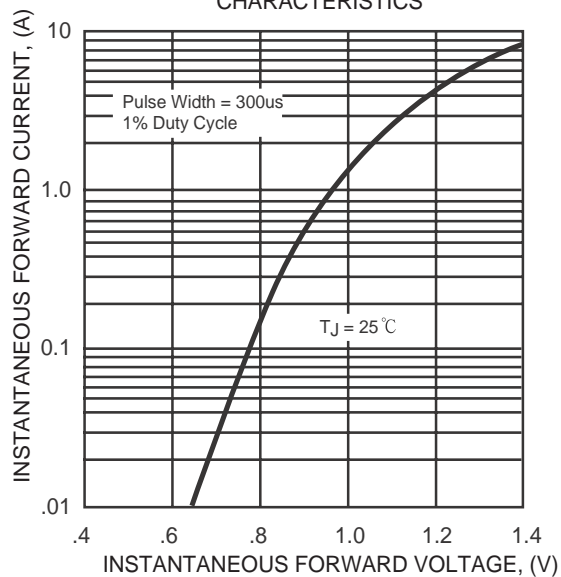
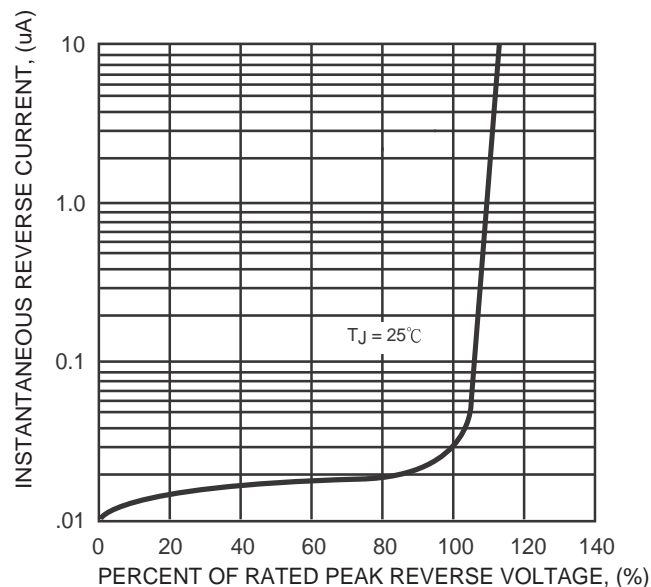
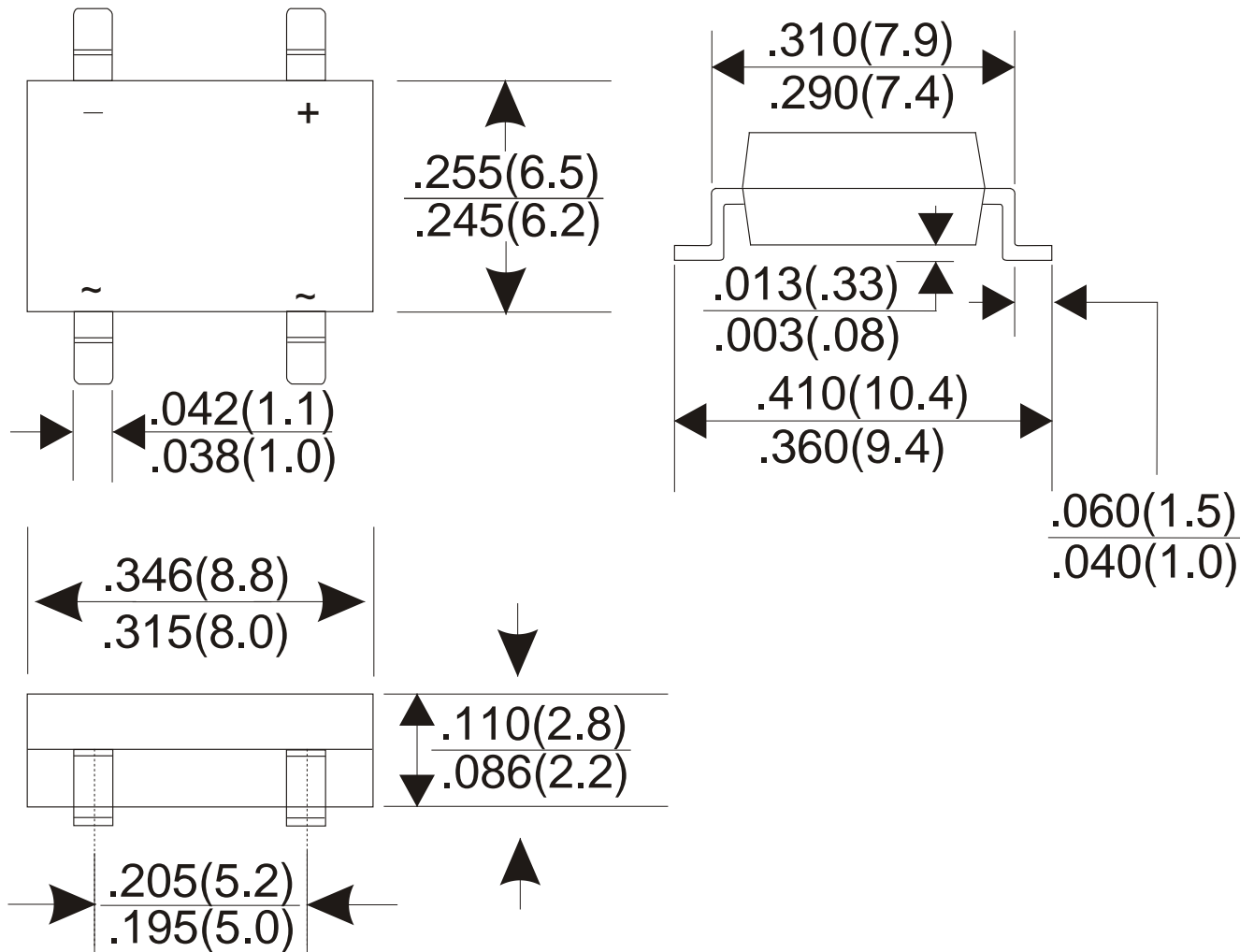


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS





### DBS(DF-S) Package Outline Dimensions



Dimensions in inches and (millimeters)



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