

# Bridge Rectifiers Reverse Voltage-1000v Forward current-10A

#### **Features**

Glass passivated chip
High surge current capability
Ldeal for surface mounted applications
Low power loss, high efficiency
Plastic Case Material has UL Flammability

#### Mechanical Data

Package:HBS

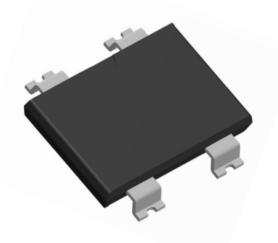
Terminals:Tin Plated leads, solderable per

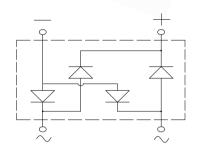
Mil-STD-750 Method 2026

Polarity: As marked

Molding compound meets UL 94 V-0 flammability rating,

**ROHS-compliant** 





#### Maximum Ratings (Ta=25℃ Unless otherwise specified)

| Type Number  | SYMBOL             | HBS1010   | Umit             |  |
|--|--------------------|-----------|------------------|--|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$          | 1000      | V                |  |
| Maximum RMS Voltage  | $V_{RMS}$          | 700       | V                |  |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>    | 1000      | V                |  |
| Maximum Average Forward Rectified Current  | IO <sub>(AV)</sub> | 10.0      | Α                |  |
| Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated | - IFSM             | 200.0     | А                |  |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, Tj=25°C                            | II GIVI            | 400.0     | А                |  |
| Current squared time<br>@1ms≤t8.3≤ms Tj=25℃,Rating of per diode  | l <sup>2</sup> t   | 166.0     | A <sup>2</sup> S |  |
| Maximum Forward Voltage at 10.0A DC  | V <sub>FM</sub>    | 1.1       | V                |  |
| Maximum Reverse Current TA = 25℃   | ID                 | 5         | uA               |  |
| at Rated DC Blocking Voltage TA = 125℃   | - IR               | 100       |                  |  |
| Typical Thermal Resistance   | $R_{QJa}$          | 75.0      | °C/W             |  |
| Operating Junction Temperature Range   | T <sub>J</sub>     | —55to+150 | $^{\circ}$ C     |  |
| Storage Temperature Range  | T <sub>STG</sub>   | 55to+150  | $^{\circ}$       |  |

FIG. 1MAXIMUM AVERAGE FORWARD CURRENT DERATING

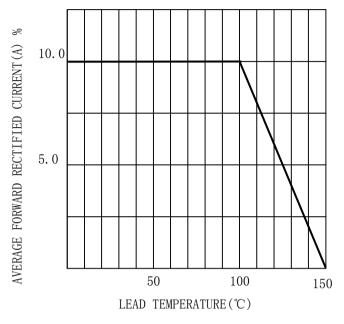


FIG. 2TYPICAL FORWARD CHARACTERISTICS

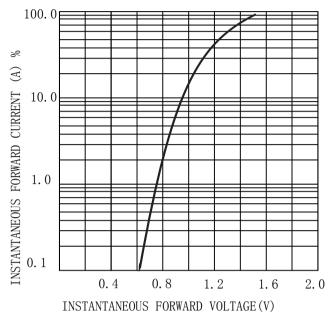


FIG. 3MAXIMUM NON-REPEITIVE SURGE CURRENT

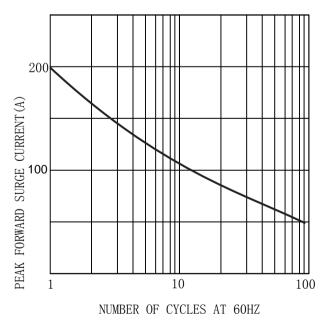
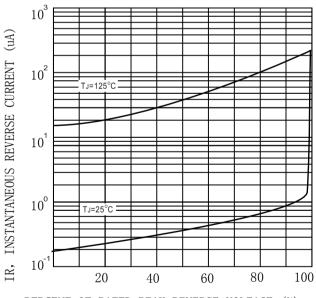
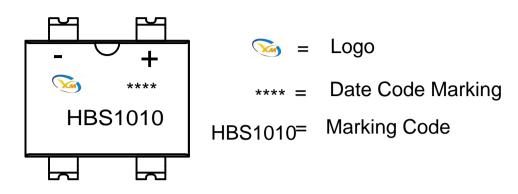


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

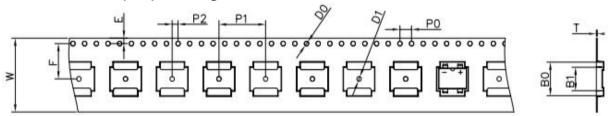
#### MARKING INFORMATION

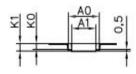


Print according to customer request

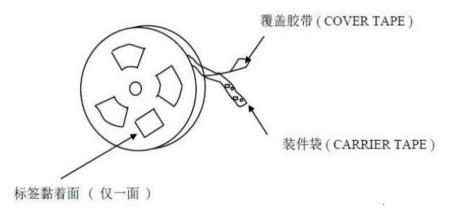
#### **PACKING REQUIRMENTS**

Carrier tape packing



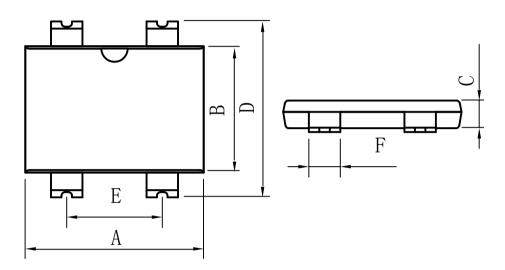


| Specificati<br>ons | Carrier tape type | Ao   | A1   | ВО   | B1   | КО   | K1   | Ро   | W    | t     | Exiplain |
|--------------------|-------------------|------|------|------|------|------|------|------|------|-------|----------|
| HBS                | DIM               | 10.6 | 8.3  | 10.9 | 7.6  | 1.9  | 2.4  | 4.0  | 16.0 | 0.3   |          |
|                    | TOLE              | ±0.2 | ±0.2 | ±0.2 | ±0.2 | ±0.1 | ±0.1 | ±0.1 | ±0.2 | ±0.05 |          |



| DEVICE<br>TYPE | Units/Reel | Tubes/ Inner<br>Box | Units/<br>Inner Box | Inner Box/<br>Carton Box | Units/<br>Carton Box |  |
|----------------|------------|---------------------|---------------------|--------------------------|----------------------|--|
| HBS            | 1500       | 1                   | 1500                | 10                       | 15000                |  |

#### Outline Dimensions



| HBS |       |       |      |       |  |  |
|-----|-------|-------|------|-------|--|--|
| DIM | INC   | HES   | MM   |       |  |  |
| DIM | MIN   | MAX   | MIN  | MAX   |  |  |
| A   | 0. 39 | 0.41  | 10.0 | 10.4  |  |  |
| В   | 0. 28 | 0. 29 | 7. 0 | 7.4   |  |  |
| С   | 0.06  | 0. 07 | 1. 4 | 1. 7  |  |  |
| D   | 0.38  | 0.40  | 9. 7 | 10. 2 |  |  |
| Е   | 0. 21 | 0. 22 | 5. 3 | 5. 7  |  |  |
| F   | 0.07  | 0.08  | 1. 7 | 2.0   |  |  |



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