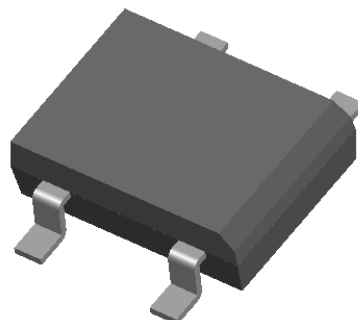




**Bridge Rectifiers**  
**Reverse Voltage-1000v**  
**Forward current-1A**

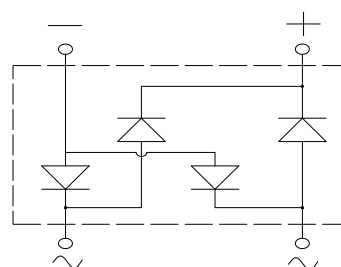
**Features**

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



**Mechanical Data**

Package: DBS  
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°C Unless otherwise specified)**

| Type Number                                                                                                 | SYMBOL      | DB107S    | Unit             |
|-------------------------------------------------------------------------------------------------------------|-------------|-----------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                      | $V_{RRM}$   | 1000      | V                |
| Maximum RMS Voltage                                                                                         | $V_{RMS}$   | 700       | V                |
| Maximum DC Blocking Voltage                                                                                 | $V_{DC}$    | 1000      | V                |
| Maximum Average Forward Rectified Current at $T_L = 100^\circ\text{C}$                                      | $I_{O(AV)}$ | 1.0       | A                |
| Peak Forward Surge Current<br>8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated | IFSM        | 30.0      | A                |
| Forward Surge Current (Non-repetitive)<br>@1ms, square wave, 1 cycle, $T_j=25^\circ\text{C}$                |             | 60.0      | A                |
| Current squared time<br>@1ms≤t≤8.3ms $T_j=25^\circ\text{C}$ , Rating of per diode                           | $I^2t$      | 3.7       | A <sup>2</sup> S |
| Maximum Forward Voltage at 1.0A DC                                                                          | $V_{FM}$    | 1.1       | V                |
| Maximum Reverse Current $T_A = 25^\circ\text{C}$                                                            | IR          | 5         | uA               |
| at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$                                                      |             | 100       |                  |
| Typical Thermal Resistance                                                                                  | $R_{QJa}$   | 75.0      | °C/W             |
| Operating Junction Temperature Range                                                                        | $T_J$       | —55to+150 | °C               |
| Storage Temperature Range                                                                                   | $T_{STG}$   | —55to+150 | °C               |



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

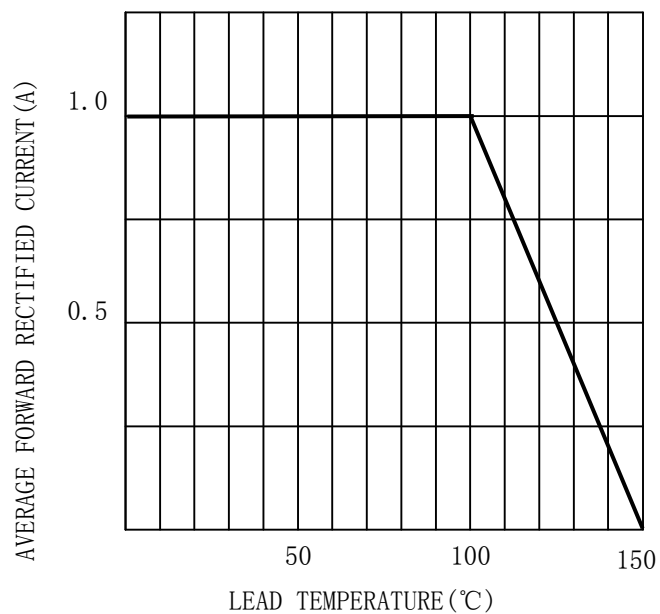


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

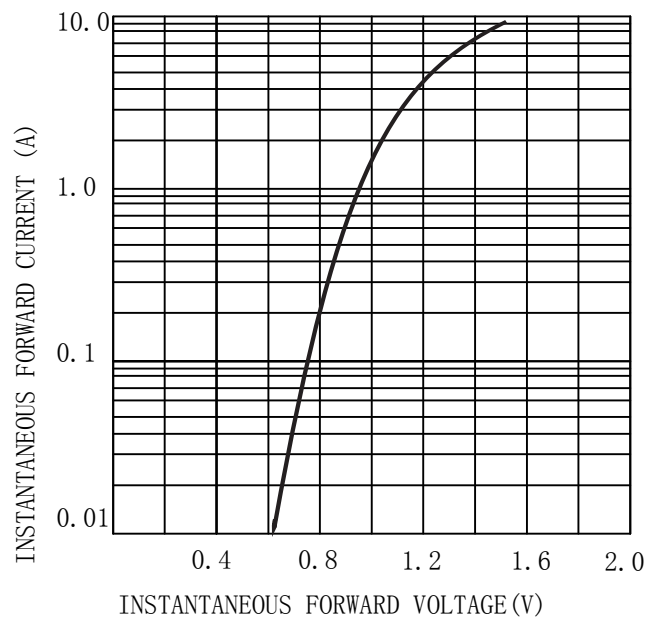


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

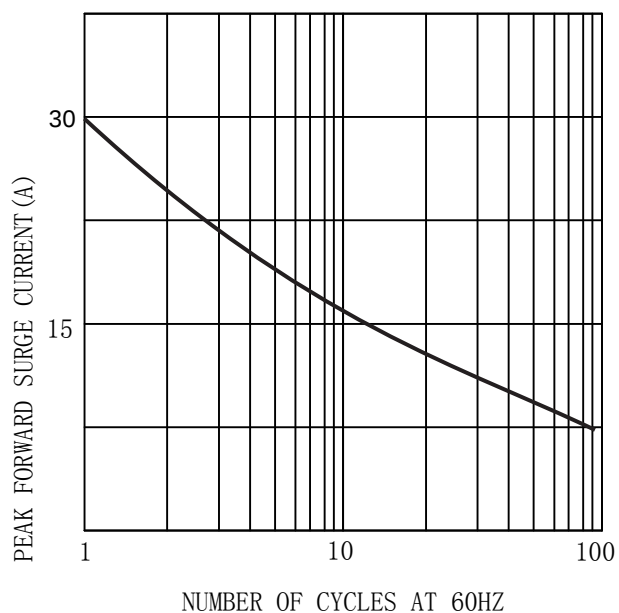
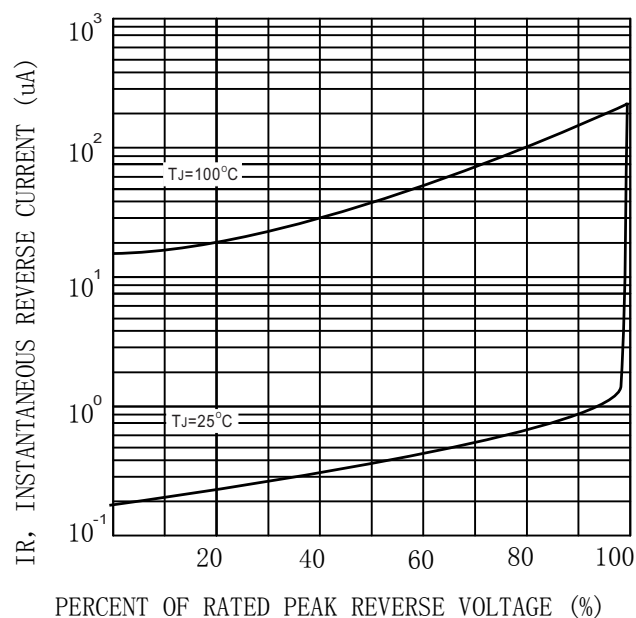


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION



= Logo



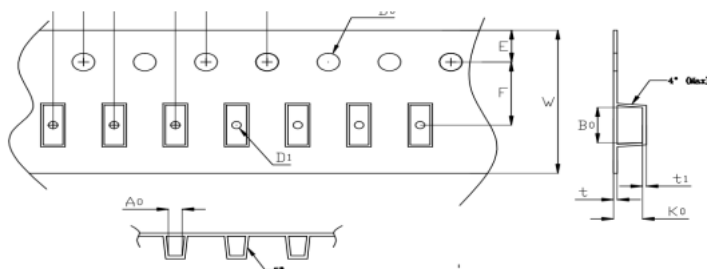
= Date Code Marking

DB107S = Marking Code

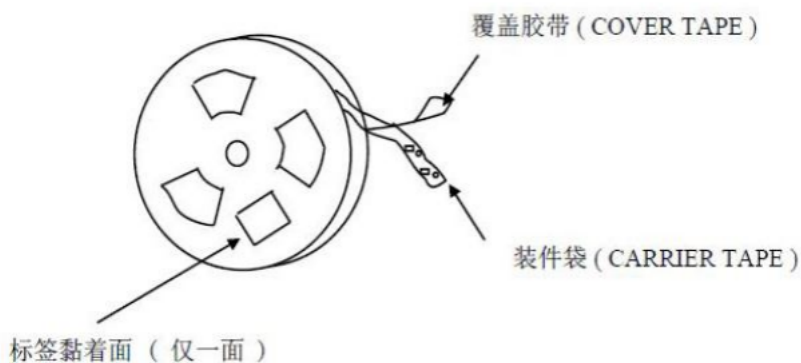
Print according to customer request

## PACKING REQUIRMENTS

### • Carrier tape packing



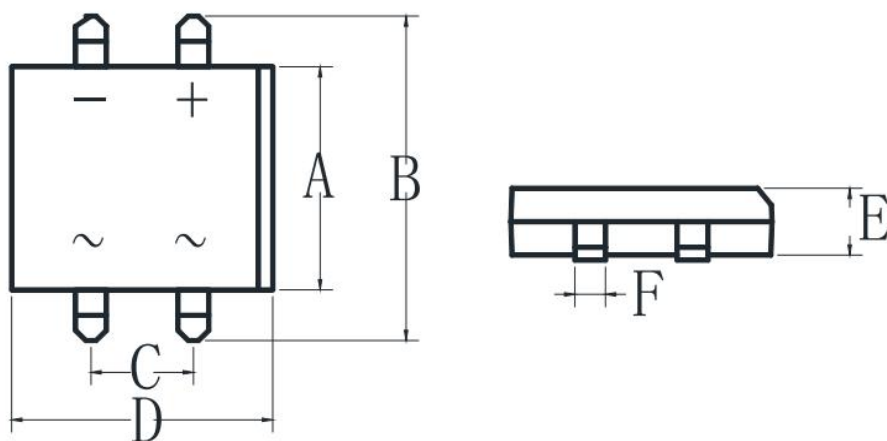
| Specifications | Carrier tape type | Ao         | Bo         | Ko         | Po         | W          | t1         | Explain |
|----------------|-------------------|------------|------------|------------|------------|------------|------------|---------|
| DBS            | Anti-static       | 8.70± 0.10 | 10.41±0.10 | 3.30± 0.10 | 4.00± 0.10 | 16.0± 0.30 | 0.25± 0.05 |         |



| DEVICE TYPE | Tape width | 13"Reel         |             |                 |
|-------------|------------|-----------------|-------------|-----------------|
|             |            | Q'TY/REEL (pcs) | BOX/CARTOON | Q'TY/REEL (pcs) |
| DBS         | 16mm       | 1500            | 18          | 27000           |



## Outline Dimensions



| DBS |         |      |      |      |
|-----|---------|------|------|------|
| DIM | INC HES |      | MM   |      |
|     | MIN     | MAX  | MIN  | MAX  |
| A   | 0.24    | 0.26 | 6.10 | 6.50 |
| B   | 0.37    | 0.39 | 9.50 | 9.90 |
| C   | 0.19    | 0.20 | 4.80 | 5.20 |
| D   | 0.31    | 0.33 | 7.95 | 8.35 |
| E   | 0.09    | 0.11 | 2.30 | 2.70 |
| F   | 0.04    | 0.05 | 0.90 | 1.20 |



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