

## 5A SURFACE MOUNT SCHOTTKY BRIDGE RECTIFIER

### FEATURES:

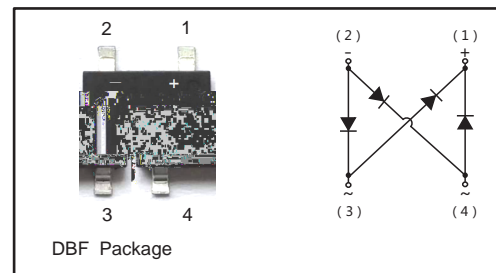
- Glass Passivated Chip Junction
- Reverse Voltage - 100 V
- Forward Current - 5.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: DBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 233.7mg 0.00824oz

### PINNING

| PIN | DESCRIPTION          |
|-----|----------------------|
| 1   | Output Anode ( + )   |
| 2   | Output Cathode ( - ) |
| 3   | Input Pin ( ~ )      |
| 4   | Input Pin ( ~ )      |



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

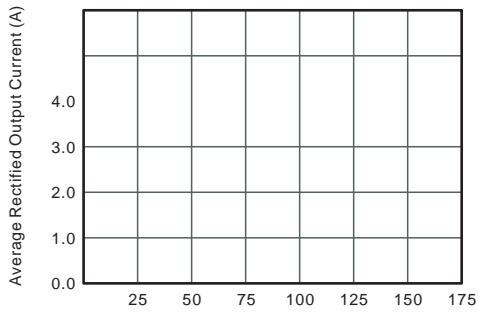
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter                                                                                         | Symbols        | KDBF510          | Units |
|---------------------------------------------------------------------------------------------------|----------------|------------------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                           | $V_{RRM}$      | 100              | V     |
| Maximum RMS voltage                                                                               | $V_{RMS}$      | 70               | V     |
| Maximum DC Blocking Voltage                                                                       | $V_{DC}$       | 100              | V     |
| Average Rectified Output Current                                                                  | $I_O$          | 5.0              | A     |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$      | 80               | A     |
| Maximum Forward Voltage<br>@ $I_F=3A$<br>@ $I_F=5A$                                               | $V_F$          | 0.8(TYP)<br>0.86 | V     |
| Maximum DC Reverse Current at Rated DC Blocking Voltage<br>@ $T_A=25\text{ }^\circ\text{C}$       | $I_R$          | 0.3              | m     |
| Typical Junction Capacitance ( Note1 )                                                            | $C_j$          | 300              | pF    |
| Operating and Storage Temperature Range                                                           | $T_j, T_{stg}$ | -55 ~ +150       | °C    |

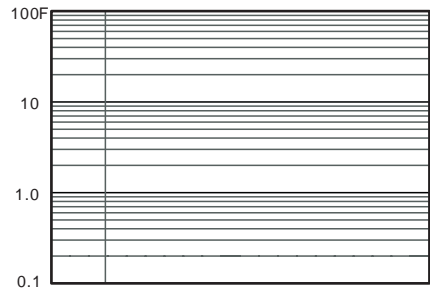
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad.

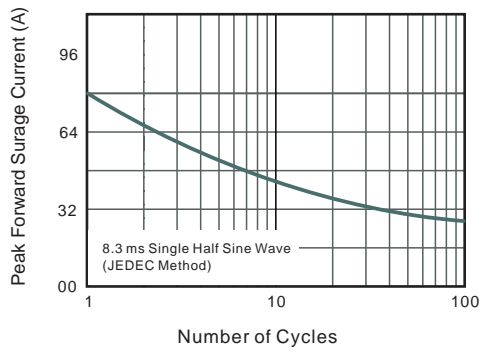
**Fig.1 Average Rectified Output Current Derating Curve**



**Fig.2 Typical Reverse Characteristics**

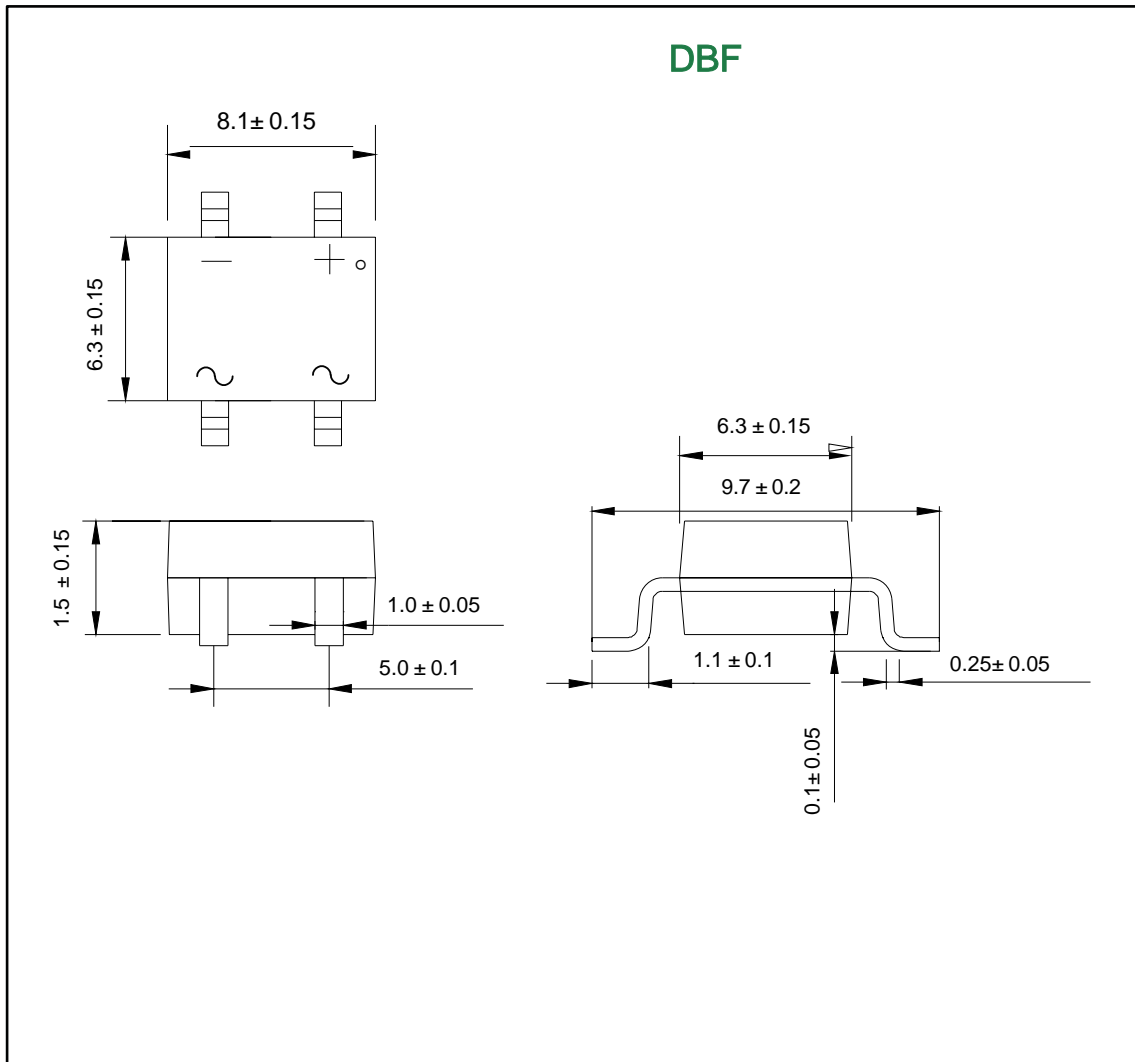


**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads



The recommended mounting pad size