

### FEATURES:

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 3.0 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: DBF
- Terminals: Solderable per MIL-STD-750, Method 2026

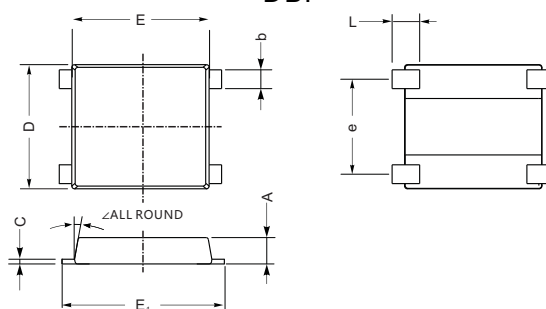
### VOLTAGE RANGE

1000 Volts

### CURRENT

3.0 Ampere

### DBF



| UNIT |     | A   | C    | D   | E   | E <sub>1</sub> | L    | e   | b    | ∠   |
|------|-----|-----|------|-----|-----|----------------|------|-----|------|-----|
| mm   | max | 1.5 | 0.29 | 7.0 | 7.6 | 8.9            | 1.6  | 5.3 | 1.15 | 10° |
|      | min | 1.3 | 0.17 | 6.2 | 7.1 | 8.4            | 1.0  | 4.9 | 0.95 |     |
| mil  | max | 59  | 12   | 276 | 299 | 350            | 55   | 209 | 45   |     |
|      | min | 51  | 7    | 244 | 280 | 331            | 31.5 | 193 | 37   |     |

### 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 %.

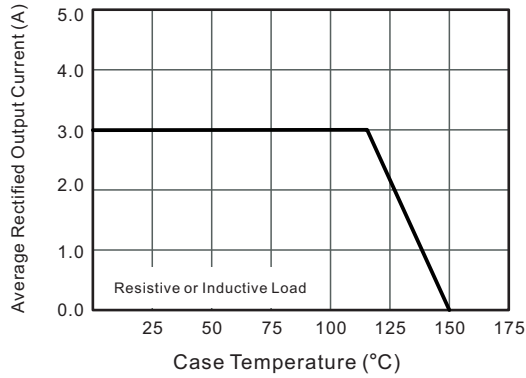
| Parameter                                                                                                                         | Symbols        | DBF310     | Units              |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------|------------|--------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                                           | $V_{RRM}$      | 1000       | V                  |
| Maximum RMS voltage                                                                                                               | $V_{RMS}$      | 700        | V                  |
| Maximum DC Blocking Voltage                                                                                                       | $V_{DC}$       | 1000       | V                  |
| Average Rectified Output Current                                                                                                  | $I_O$          | 3.0        | 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 at 3.0 A                                                                                                  | $V_F$          | 1.1        | V                  |
| Maximum DC Reverse Current @ $T_A=25\text{ }^{\circ}\text{C}$<br>at Rated DC Blocking Voltage @ $T_A=125\text{ }^{\circ}\text{C}$ | $I_R$          | 5<br>100   | $\mu\text{A}$      |
| Typical Junction Capacitance ( Note1 )                                                                                            | $C_j$          | 30         | pF                 |
| Operating and Storage Temperature Range                                                                                           | $T_J, T_{stg}$ | -55 ~ +150 | $^{\circ}\text{C}$ |

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

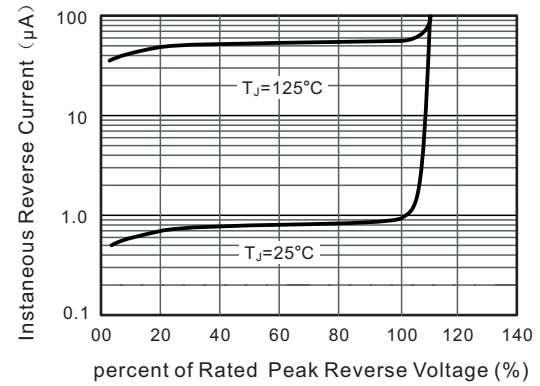
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad.

## RATING AND CHARACTERISTIC CURVES (DBF310)

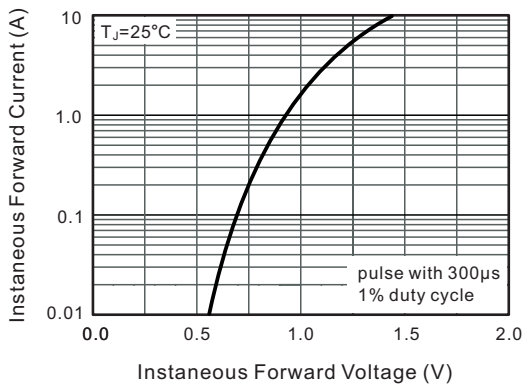
**Fig.1 Average Rectified Output Current Derating Curve**



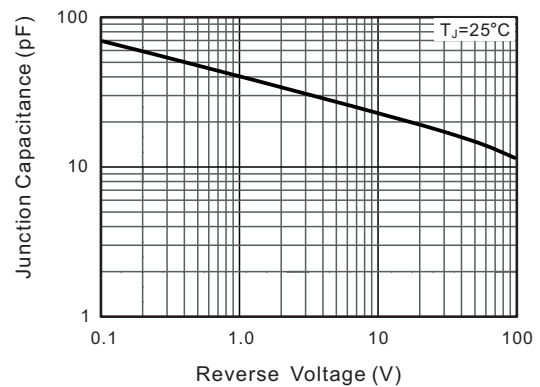
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



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

