



DB Plastic-Encapsulate Bridge Rectifier

DB201 THRU DB207 General Purpose Bridge Rectifier

Features

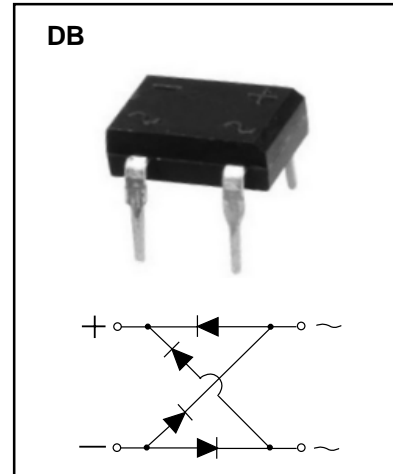
- $I_{F(AV)}$ 2.0A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- DB20X
- X : From 01 To 7



Limiting Values (Absolute Maximum Rating)

| Item | Symbol | Unit | Conditions | DB2 | | | | | | |
|--|----------------|----------------------|---|-----------|-----|-----|-----|-----|-----|------|
| | | | | 01 | 02 | 03 | 04 | 05 | 06 | 07 |
| Repetitive Peak Reverse Voltage | V_{RRM} | V | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Maximum RMS Voltage | V_{RMS} | V | | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| Average Rectified Output Current | I_o | A | 60Hz sine wave, R-load, $T_a=25^\circ\text{C}$ | 2.0 | | | | | | |
| Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$ | 60 | | | | | | |
| Current Squared Time | I^2t | A^2S | $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode | 15 | | | | | | |
| Operation Junction and Storage Temperature Range | T_j, T_{stg} | $^\circ\text{C}$ | | -55 ~+150 | | | | | | |

Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

| Item | Symbol | Unit | Test Condition | Max |
|----------------------|------------------|--------------------|---|-----|
| Peak Forward Voltage | V_{FM} | V | $I_{FM}=2.0\text{A}$, Pulse measurement, Rating of per diode | 1.1 |
| Peak Reverse Current | I_{RRM} | μA | $V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode | 10 |
| Thermal Resistance | $R_{\theta J-A}$ | $^\circ\text{C/W}$ | Between junction and ambient, On glass-epoxy substrate | 68 |
| | $R_{\theta J-L}$ | | Between junction and lead | 15 |

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

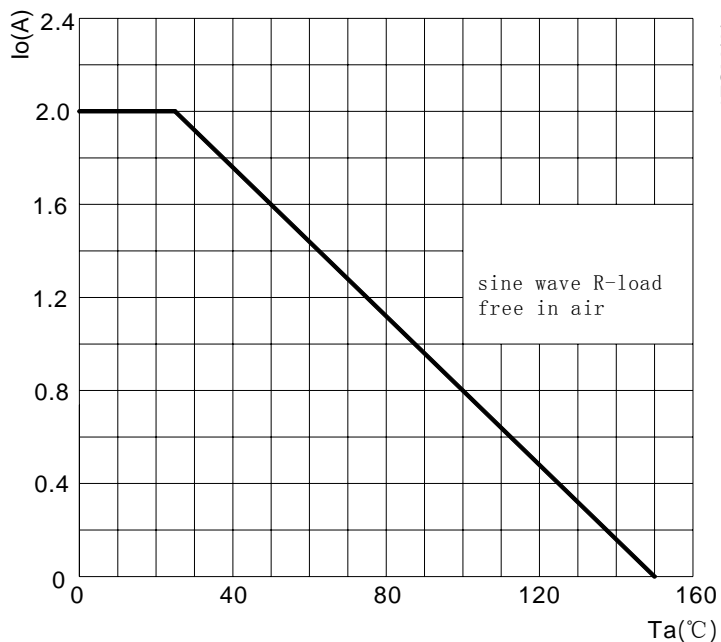


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

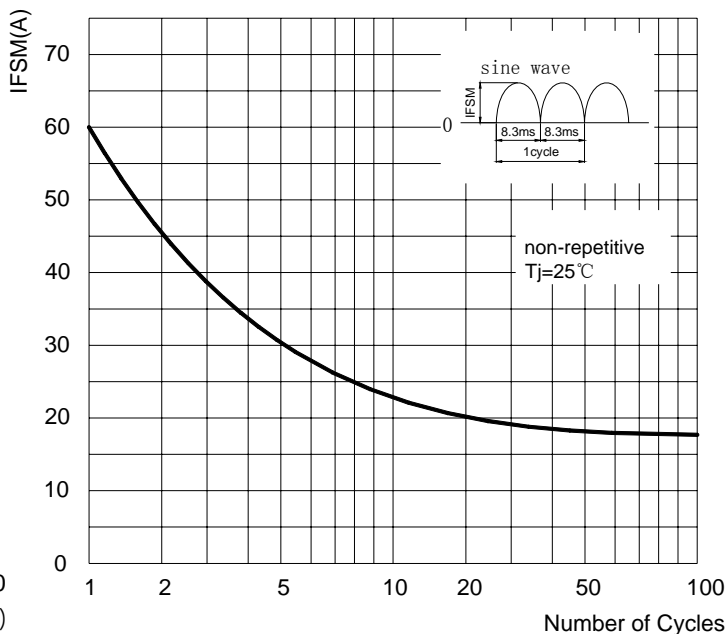


FIG.3: TYPICAL FORWARD CHARACTERISTICS

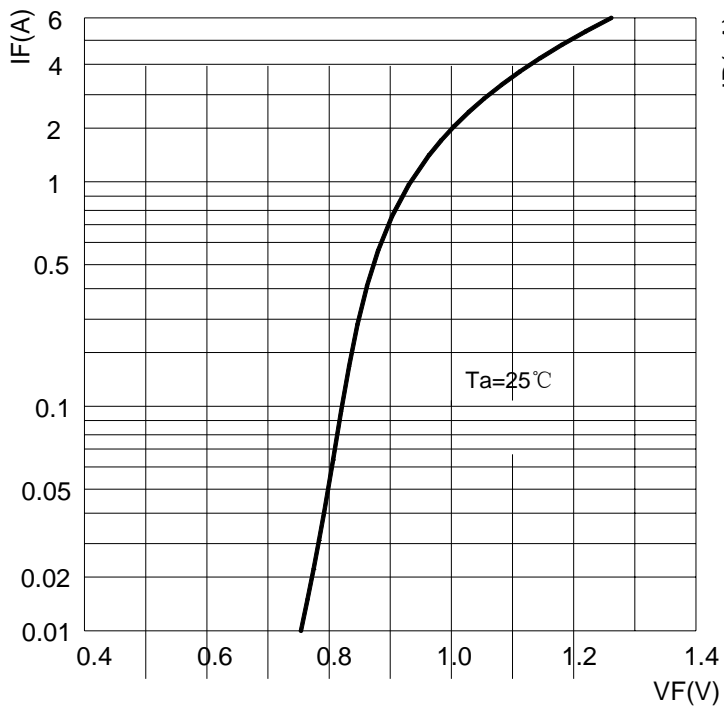
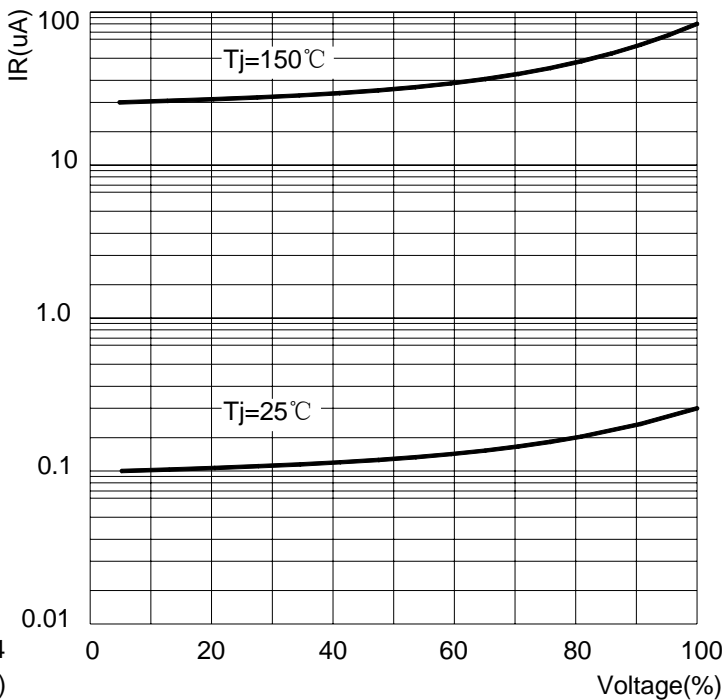
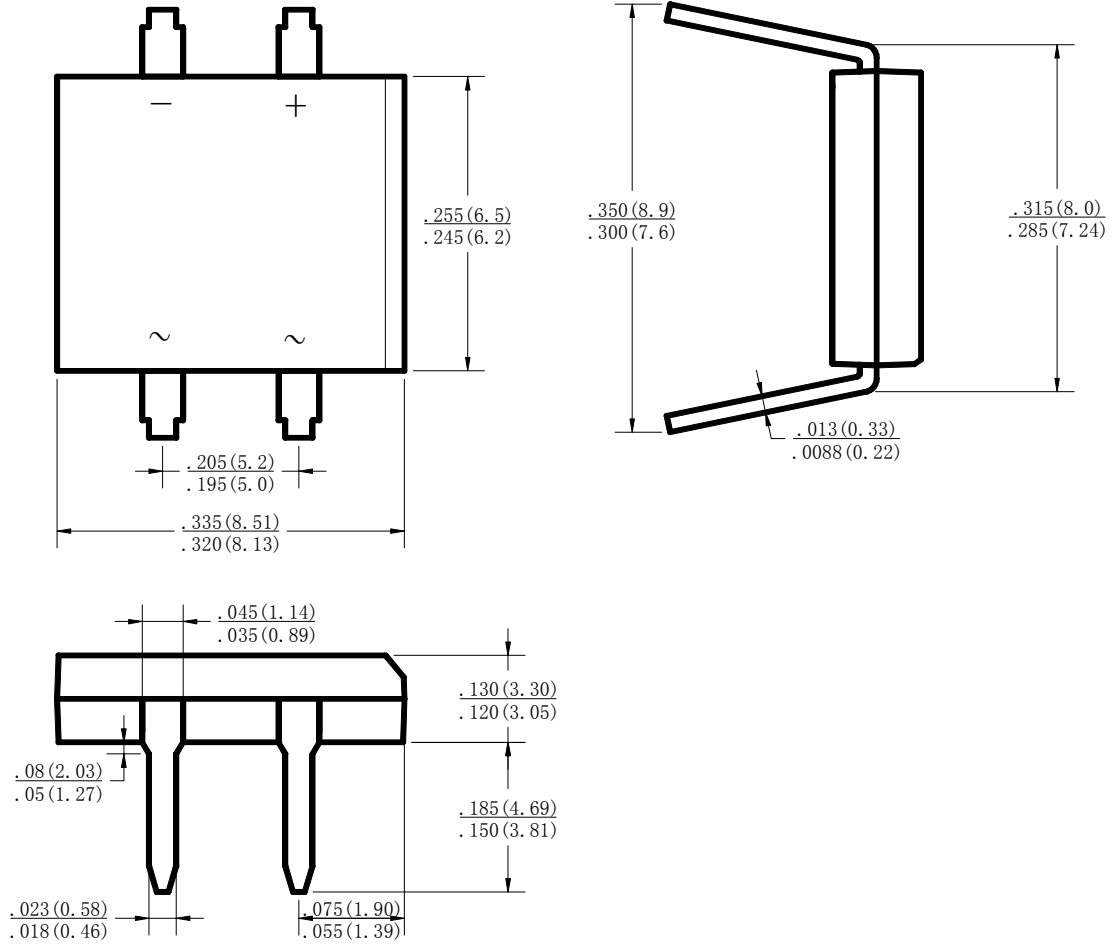


FIG.4: TYPICAL REVERSE CHARACTERISTICS



DB Package Outline Dimensions



Dimensions in inches and (millimeters)

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.