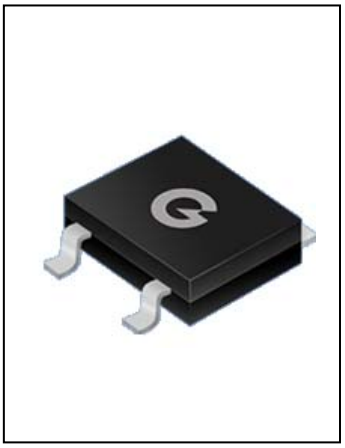
# SILICON BRIDGE RECTIFIERS *DB151S--DB157S*

## FEATURES

Lead-free



- Rating to 1000V PRVP
- Surge overload rating to 40 Amperes peak
- Glass passivated chip junctions
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Lead: silver plated copper, solderde plated
- Plastic material has UL flammability classification94V-O

## Maximum Ratings (@TA = 25°C unless otherwise specified)

| Characteristic | Symbol | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Reverse Voltage | $V_{RMS}$ | 35 | 75 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward Output current @$T_A$=40℃ | $I_{F(AV)}$ | 1.5 | | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load | $I_{FSM}$ | 40 | | | | | | | A |

## Thermal Characteristics

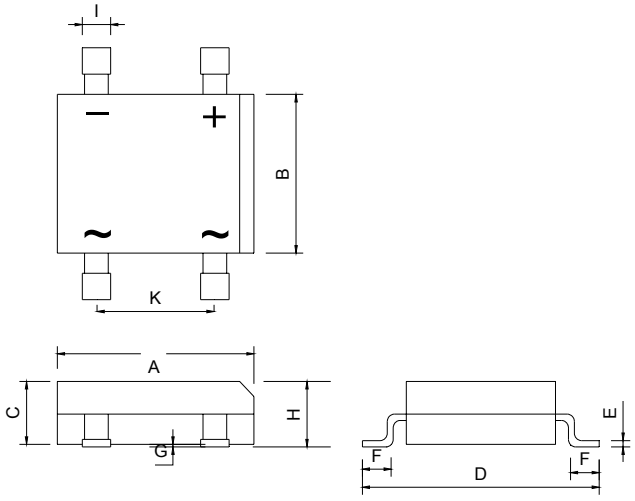
| Characteristic | Symbol | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Operating junction temperature range | $T_J$ | -55 -- +150 | | | | | | | ℃ |
| Storage temperature range | $T_{STG}$ | -55 -- +150 | | | | | | | ℃ |

## Electrical Characteristics (@TA = 25°C unless otherwise specified)

| Characteristic | Symbol | DB151S | DB152S | DB153S | DB154S | DB155S | DB156S | DB157S | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Maximum instantaneous forward voltage at 1.5A | $V_F$ | 1.1 | | | | | | | V |
| Maximum reverse current @$T_A$=25℃ | $I_R$ | 10 | | | | | | | μA |
| at rated DC blocking voltage @$T_A$=100℃ | | 1.0 | | | | | | | mA |

## SILICON BRIDGE RECTIFIERS *DB151S--DB157S*

## PACKAGE OUTLINE DIMENSIONS




| DFS | | |
|---|---|---|
| Dim | Min | Max |
| A | 8.20 | 8.60 |
| B | 6.10 | 6.50 |
| C | 2.35 | 2.65 |
| D | 9.80 | 10.20 |
| E | 0.15 | 0.35 |
| F | 0.90 | 1.50 |
| G | 0.20MAX | |
| H | 2.50 | 2.80 |
| I | 1.00 | 1.40 |
| K | 4.80 | 5.20 |
| All Dimensions in mm | | |

## PACKAGE INFORMATION

| Device | Package | Shipping |
|---|---|---|
| DB151S--DB157S | DFS | 50unit/pipe |

# SILICON BRIDGE RECTIFIERS *DB151S--DB157S*

**FIG.1 -- TYPICAL FORWARD CURRENT DERATING CURVE**

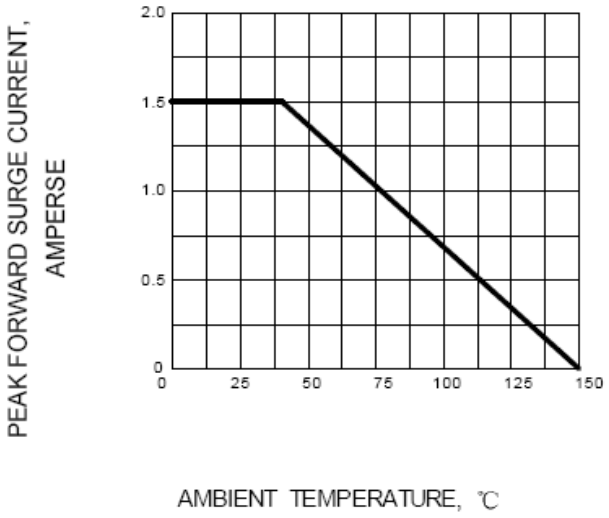



**FIG.2 -- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

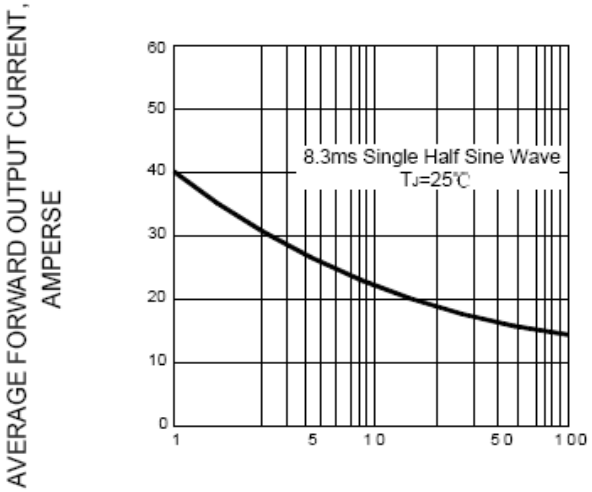



**FIG.3 -- TYPICAL FORWARD CHARACTERISTIC**

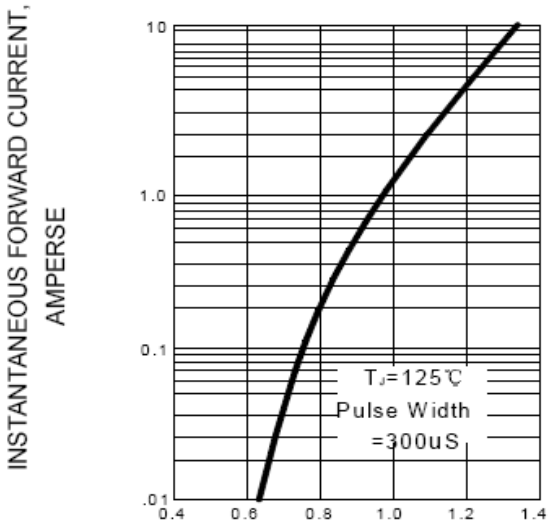



**FIG.4 -- TYPICAL REVERSE CHARACTERISTIC**