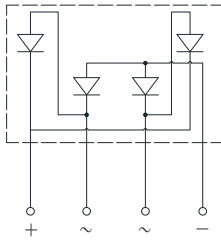
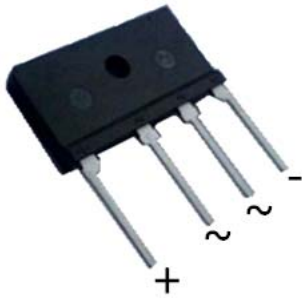


Bridge Rectifiers



Features

- Glass passivated chip junction
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** JA
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | D35JA05 | D35JA10 | D35JA20 | D35JA40 | D35JA60 | D35JA80 | D35JA100 |
|---|--|------------------|------------|---------|---------|---------|---------|---------|----------|
| Device marking code | | | D35JA05 | D35JA10 | D35JA20 | D35JA40 | D35JA60 | D35JA80 | D35JA100 |
| Maximum Repetitive Peak Reverse Voltage | VRRM | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Maximum RMS Voltage | VRMS | V | 35 | 70 | 140 | 280 | 420 | 560 | 700 |
| Maximum DC blocking Voltage | VDC | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average Rectified Output Current @60Hz sine wave, R-load | With heatsink $T_c=80^\circ\text{C}$ | IO | A | 35.0 | | | | | |
| | Without heatsink $T_a=25^\circ\text{C}$ | | | 3.6 | | | | | |
| Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^\circ\text{C}$ | IFSM | A | 360 | | | | | | |
| Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^\circ\text{C}$ | | | 720 | | | | | | |
| Current squared time @1ms≤t≤8.3ms $T_j=25^\circ\text{C}$, rating of per diode | I ² t | A ² S | 537.8 | | | | | | |
| Storage temperature | T _{stg} | °C | -55 ~ +150 | | | | | | |
| Junction temperature | T _j | °C | -55 ~ +150 | | | | | | |
| Dielectric strength @ Terminals to case, AC 1 minute | V _{dis} | KV | 2 | | | | | | |
| Mounting torque @Recommend torque: 5kg·cm | Tor | kg·cm | 8 | | | | | | |



D35JA05 THRU D35JA100

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | D35JA05 | D35JA10 | D35JA20 | D35JA40 | D35JA60 | D35JA80 | D35JA100 |
|---|----------------|------|---|---------|---------|---------|---------|---------|---------|----------|
| Maximum instantaneous forward voltage drop per diode | V _F | V | I _{FM} =17.5A | | | | 1.0 | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode | I _R | μA | T _j =25°C | | | | 5 | | | |
| | | | T _j =125°C | | | | 100 | | | |
| Typical junction capacitance | C _j | pF | Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C | | | | 116 | | | |

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

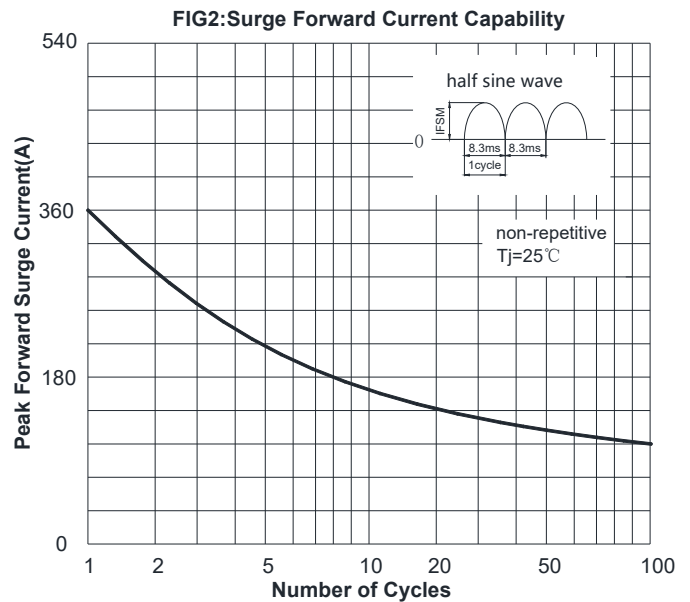
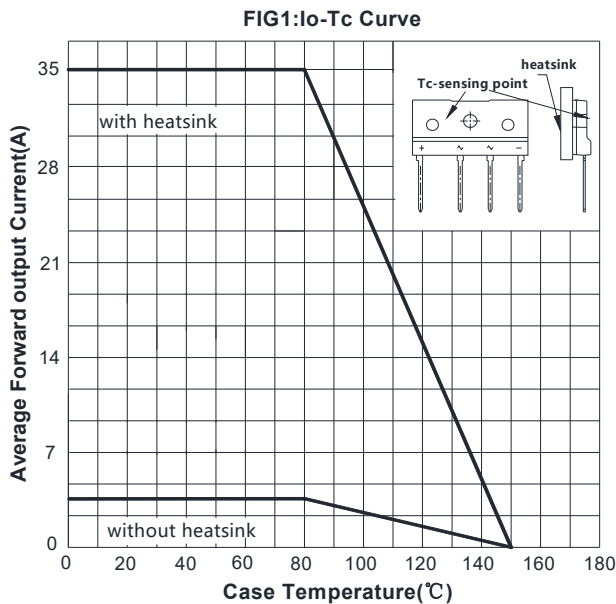
| PARAMETER | | SYMBOL | UNIT | D35JA05 | D35JA10 | D35JA20 | D35JA40 | D35JA60 | D35JA80 | D35JA100 |
|--------------------|--|-------------------|------|---------|---------|---------|---------|---------|---------|----------|
| Thermal Resistance | Between junction and ambient, Without heatsink | R _{θJ-A} | °C/W | | | | 22.0 | | | |
| | Between junction and case, With heatsink | R _{θJ-C} | | | | | 1.0 | | | |

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■ Ordering Information (Example)

| PREFERED P/N | PACKAGE CODE | UNIT WEIGHT(g) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------------|--------------|-----------------|-----------------------|-------------------------|----------------------------|---------------|
| D35JA05 ~ D35JA100 | B1 | Approximate 4.3 | 15 | 750 | 1500 | Tube |

■ Characteristics(Typical)





D35JA05 THRU D35JA100

FIG3: Typical Forward Voltage

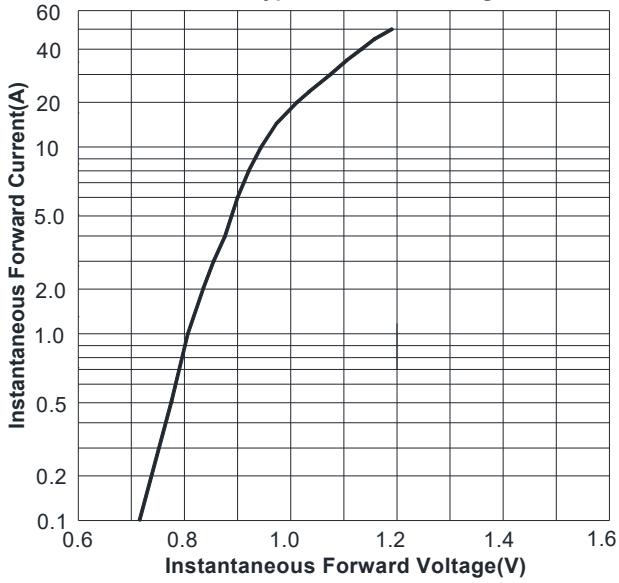
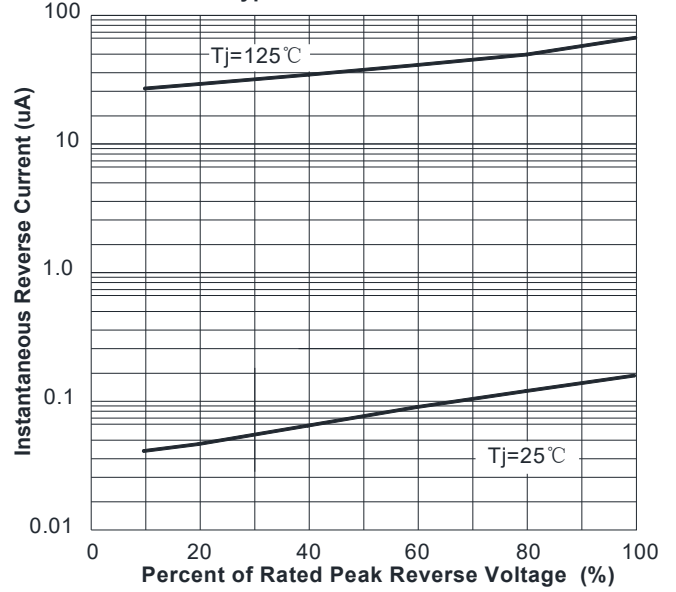
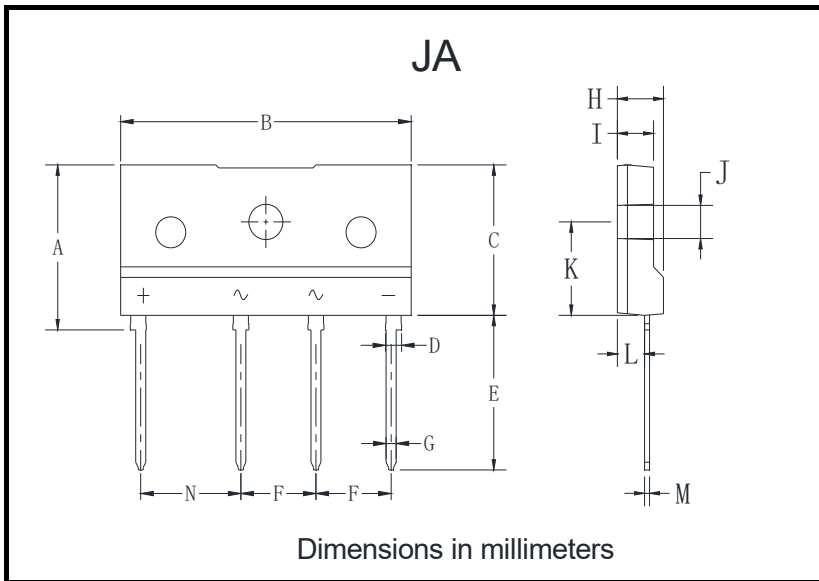


FIG4: Typical Reverse Characteristics



Outline Dimensions



| JA | | |
|-----|------|------|
| Dim | Min | Max |
| A | 15.6 | 16.2 |
| B | 28.7 | 29.3 |
| C | 14.2 | 14.8 |
| D | 1.5 | 1.7 |
| E | 14.6 | 15.2 |
| F | 7.3 | 7.7 |
| G | 0.9 | 1.1 |
| H | 4.3 | 4.9 |
| I | 3.3 | 3.9 |
| J | 3.1 | 3.4 |
| K | 8.7 | 9.3 |
| L | 2.5 | 2.9 |
| M | 0.4 | 0.6 |
| N | 9.8 | 10.2 |



D35JA05 THRU D35JA100

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