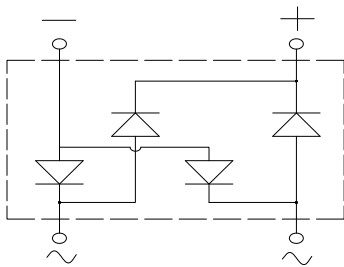
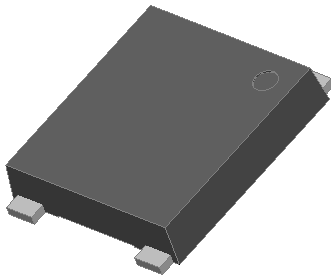


Bridge Rectifiers



Features

- UL recognition, file #E313149
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications.

Mechanical Data

- **Package:** YBS
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°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | YBS30005A | YBS3001A | YBS3002A | YBS3004A | YBS3006A | YBS3008A | YBS3010A |
|---|------------------|------------------|-----------|----------|----------|----------|----------|----------|----------|
| Device marking code | | | YBS30005A | YBS3001A | YBS3002 | YBS3004A | YBS3006A | YBS3008A | YBS3010A |
| Repetitive peak reverse voltage | VRRM | V | 50 | 100 | 200 | 400 | 600 | 800 | 1000 |
| Average rectified output current @60Hz sine wave, R-load, T _c =110°C | I _O | A | 3.0 | | | | | | |
| Surge(non-repetitive)forward current @60HZ half sine wave, 1 cycle, T _j =25°C | I _{FSM} | A | 120 | | | | | | |
| Current squared time @1ms≤t<8.3ms T _j =25°C, Rating of per diode | I ² t | A ² s | 59 | | | | | | |
| Storage temperature | T _{stg} | °C | -55 ~+150 | | | | | | |
| Junction temperature | T _j | °C | -55 ~+150 | | | | | | |

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

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | YBS30005A | YBS3001A | YBS3002A | YBS3004A | YBS3006A | YBS3008A | YBS3010A |
|--|------------------|------|-----------------------|-----------|----------|----------|----------|----------|----------|----------|
| Maximum instantaneous forward voltage drop per diode | V _F | V | I _{FM} =1.5A | 1.00 | | | | | | |
| Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =VRRM | I _{RRM} | μA | T _j =25°C | 5 | | | | | | |
| | | | T _j =100°C | 100 | | | | | | |



YBS30005A THRU YBS3010A

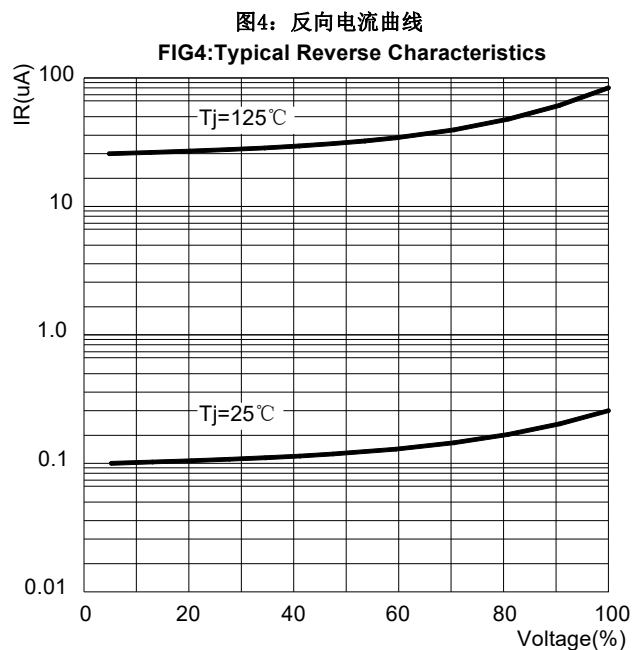
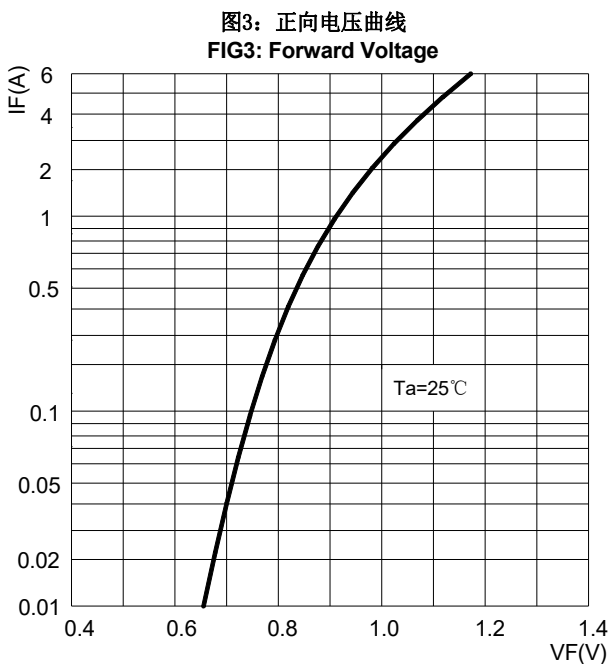
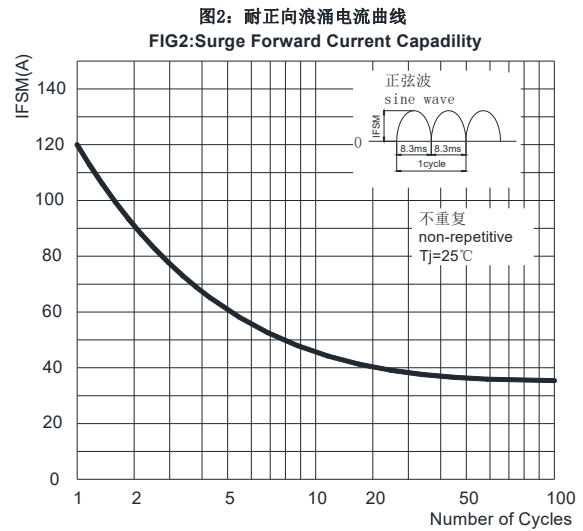
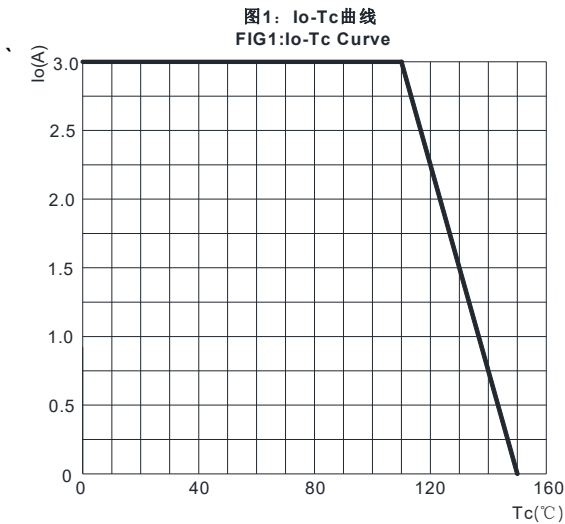
■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

| PARAMETER | | SYMBOL | UNIT | YBS30005A | YBS3001A | YBS3002A | YBS3004A | YBS3006A | YBS3008A | YBS3010A |
|--------------------|-------------------------------|-------------------|------|-----------|----------|----------|----------|----------|----------|----------|
| Thermal Resistance | Between Junction and Ambient, | R _{θJ-A} | °C/W | 55.0 | | | | | | |
| | Between Junction and Lead | R _{θJ-L} | | 15.0 | | | | | | |
| | Between Junction and Case | R _{θJ-C} | | 10.0 | | | | | | |

■ Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| YBS30005A-YBS3010A | F1 | Approximate 0.220 | 3000 | 6000 | 42000 | 13" reel |

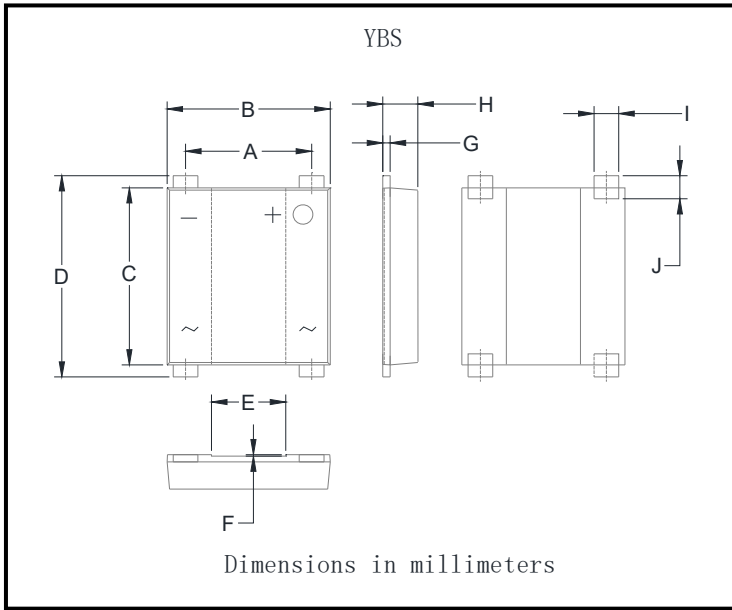
■ Characteristics(Typical)





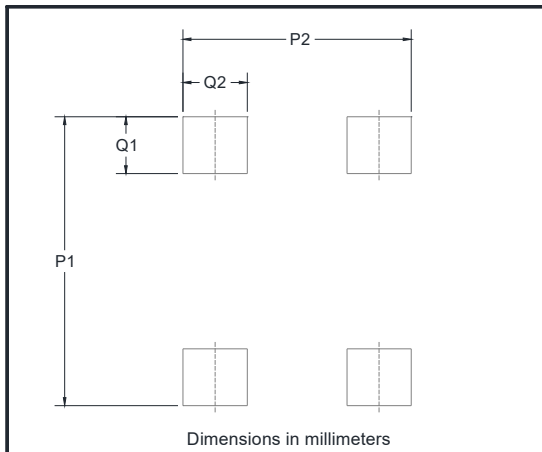
YBS30005A THRU YBS3010A

■ Outline Dimensions



| YBS | | |
|-----|------|------|
| Dim | Min | Max |
| A | 5.00 | 5.20 |
| B | 6.50 | 6.70 |
| C | 7.20 | 7.40 |
| D | 7.90 | 8.60 |
| E | 2.90 | 3.10 |
| F | 0.04 | 0.08 |
| G | 0.27 | 0.40 |
| H | 1.30 | 1.50 |
| I | 0.95 | 1.15 |
| J | 0.70 | 1.05 |

■ Suggested pad layout



| Dim | Min |
|-----|------|
| P1 | 9.15 |
| P2 | 7.10 |
| Q1 | 1.80 |
| Q2 | 2.00 |



YBS30005A THRU YBS3010A

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