


KBPC300 – KBPC310

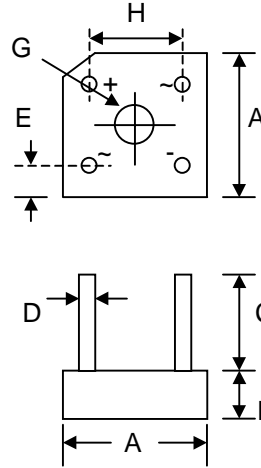
3.0A SINGLE-PHASE BRIDGE RECTIFIER

Features

- Diffused Junction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has UL Flammability 94V-0
-  Recognized File # E157705

Mechanical Data

- Case: KBPC-3, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Weight: 3.8 grams (approx.)
- Mounting Position: Through Hole for #6 Screw
- Mounting Torque: 10 cm·kg (8.8 in·lbs) Max.
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



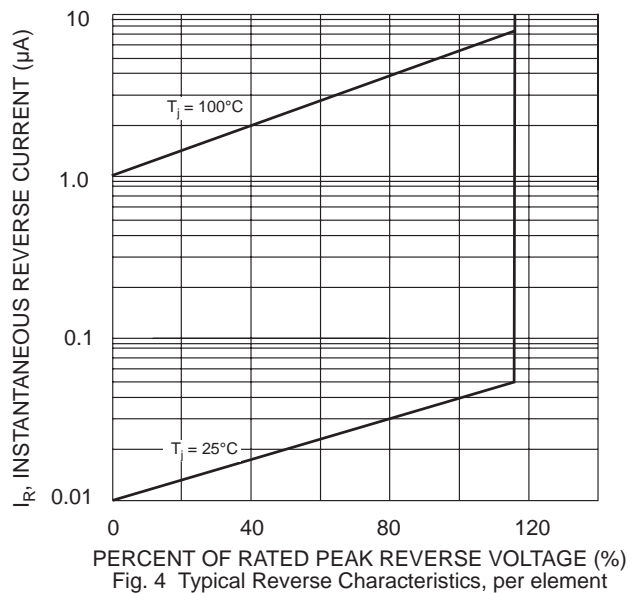
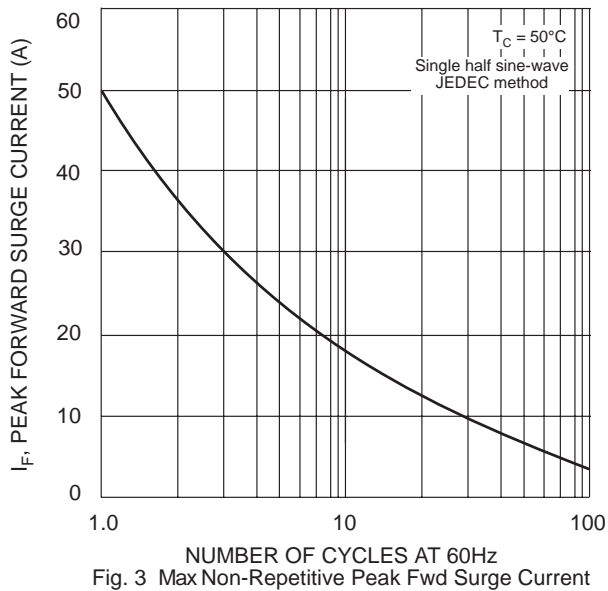
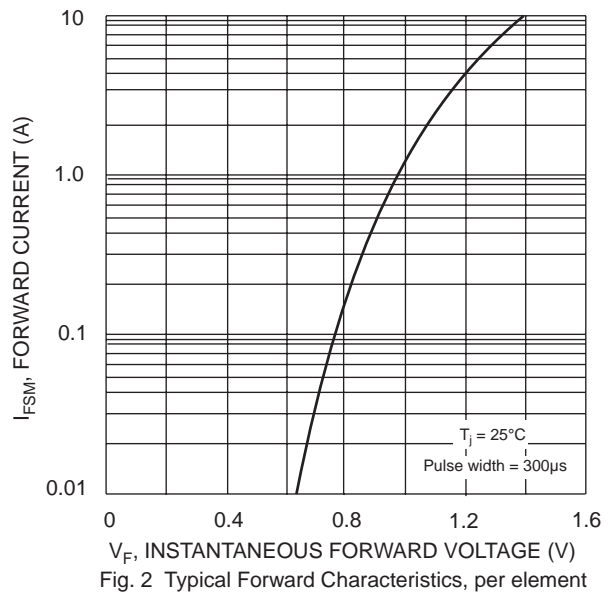
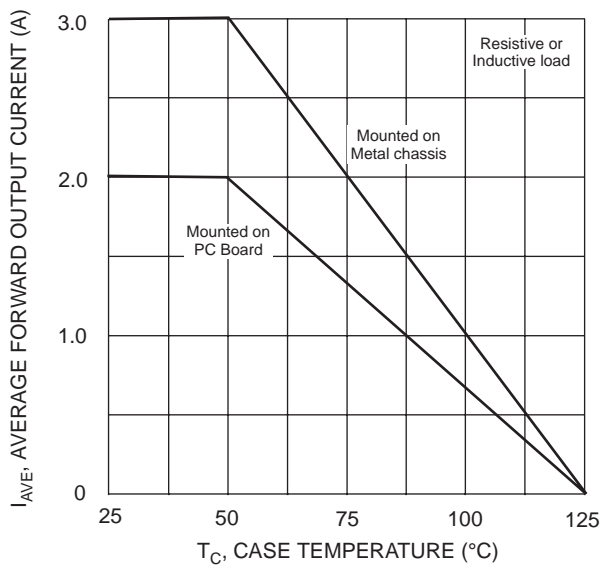
| KBPC-3 | | |
|----------------------|-------------------|-------|
| Dim | Min | Max |
| A | 14.73 | 15.75 |
| B | 5.84 | 6.86 |
| C | 19.00 | — |
| D | 0.76 Ø Typical | |
| E | 1.70 | 2.72 |
| G | Hole for #6 screw | |
| | 3.60 | 4.00 |
| H | 10.30 | 11.30 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

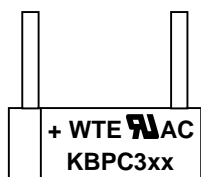
Single Phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

| Characteristic | Symbol | KBPC 300 | KBPC 301 | KBPC 302 | KBPC 304 | KBPC 306 | KBPC 308 | KBPC 310 | Unit |
|---|--|-------------|----------|----------|----------|----------|----------|----------|------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1) @T _C = 50°C | I _O | 3.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 50 | | | | | | | A |
| Forward Voltage per leg @I _F = 1.5A | V _{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C | I _R | 5.0 500 | | | | | | | µA |
| I ² t Rating for Fusing (t<8.3ms) (Note 2) | I ² _t | 10 | | | | | | | A ² s |
| Typical Junction Capacitance (Note 3) | C _j | 25 | | | | | | | pF |
| Typical Thermal Resistance per leg (Note 1) | R _{θJC} | 10 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +125 | | | | | | | °C |

Note: 1. Mounted on metal chassis.
 2. Non-repetitive, for t > 1ms and < 8.3ms.
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



MARKING INFORMATION



WTE = Manufacturer's Logo
KBPC3xx = Device Number
xx = 00, 01, 02, 04, 06, 08 or 10
Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

| Inner Box Size L x W x H (mm) | Quantity (PCS) | Carton Size L x W x H (mm) | Quantity (PCS) | Approx. Gross Weight (KG) |
|----------------------------------|-------------------|-------------------------------|-------------------|------------------------------|
| 198 x 198 x 50 | 200 | 425 x 215 x 280 | 2,000 | 8.0 |

Note: 1. Paper box, white or brown color.