Micro Commercial Components

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# KBJA4005 THRU KBJA410

## 4 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

## Features

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- High surge forward current capability
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Mounting Torque: 0.5 N•m
- UL Recognized File # E165989

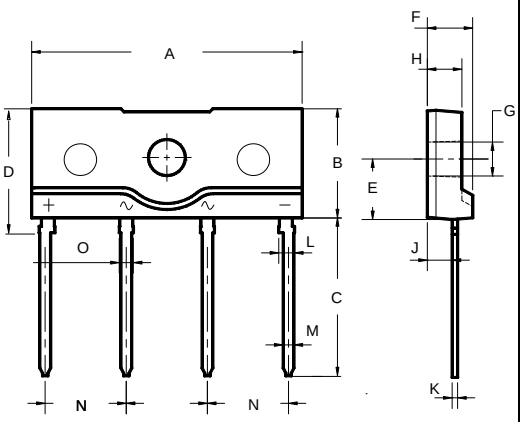
| MCC Catalog Number | Device Marking | Maximum Reccurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---|---|---|---|---|
| KBJA4005 | KBJA4005 | 50V | 35V | 50V |
| KBJA401 | KBJA401 | 100V | 70V | 100V |
| KBJA402 | KBJA402 | 200V | 140V | 200V |
| KBJA404 | KBJA404 | 400V | 280V | 400V |
| KBJA406 | KBJA406 | 600V | 420V | 600V |
| KBJA408 | KBJA408 | 800V | 560V | 800V |
| KBJA410 | KBJA410 | 1000V | 700V | 1000V |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|---|---|---|
| Average Forward Current | $I_{F(AV)}$ | 4 A | Tc = 100°C |
| Peak Forward Surge Current | $I_{FSM}$ | 120A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | $V_F$ | 1.05V | $I_{FM}$ = 2.0A<br>$T_J$ = 25°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$ | 10 µA | $T_a$ = 25°C |
| $I^2t$ Rating for fusing | $I^2t$ | 60A$^2$S | (1ms< t<8.3ms) |
| Thermal Resistance | $R_{thJA}$<br>$R_{thJC}$ | 35°C/W<br>5.8°C/W | |

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

JB




| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| A | .972 | .996 | 24.70 | 25.30 | |
| B | .394 | .417 | 10.00 | 10.60 | |
| C | .575 | .598 | 14.60 | 15.20 | |
| D | .449 | .472 | 11.40 | 12.00 | |
| E | .213 | .236 | 5.40 | 6.00 | |
| F | .154 | .177 | 3.90 | 4.50 | |
| G | .122 | .134 | 3.10 | 3.40 | |
| H | .114 | .138 | 2.90 | 3.90 | |
| J | .079 | .102 | 2.00 | 2.60 | |
| K | .012 | .024 | 0.40 | 0.60 | |
| L | .053 | .061 | 1.35 | 1.55 | |
| M | .035 | .043 | 0.90 | 1.10 | |
| N | .287 | .303 | 7.30 | 7.70 | |
| O | .047 | .055 | 1.20 | 1.40 | |

## Characteristics(Typical)

**FIG1:Io-Tc Curve**

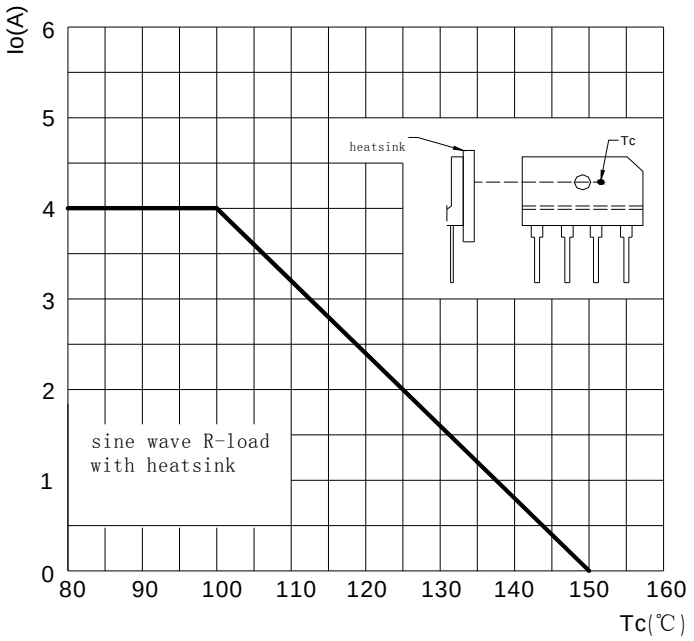



**FIG2:Surge Forward Current Capadility**

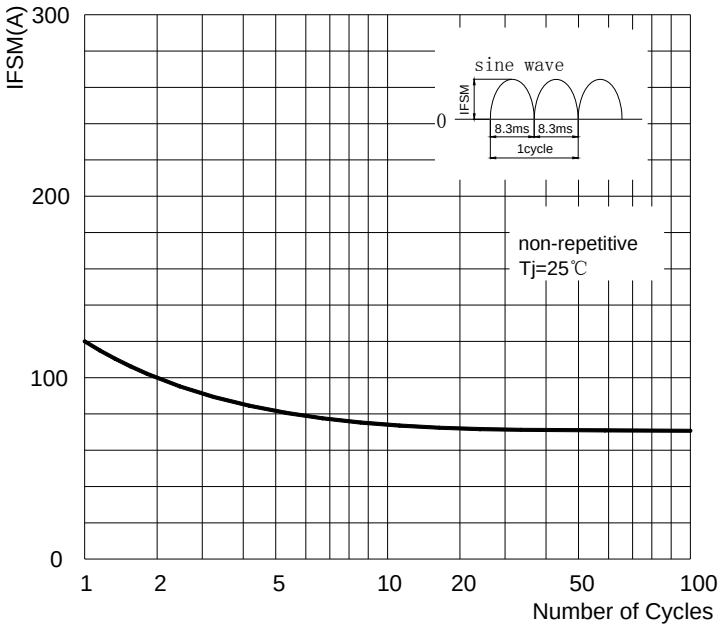



**FIG3: Forward Voltage**

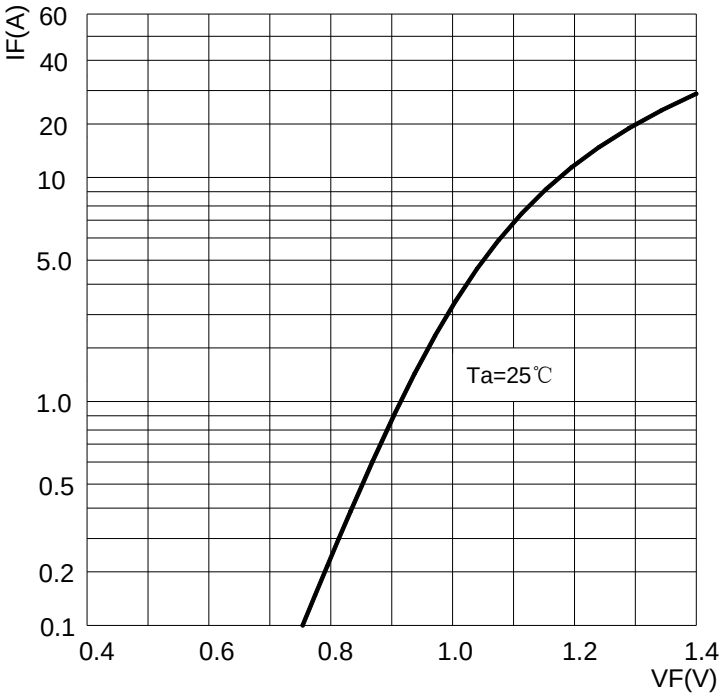
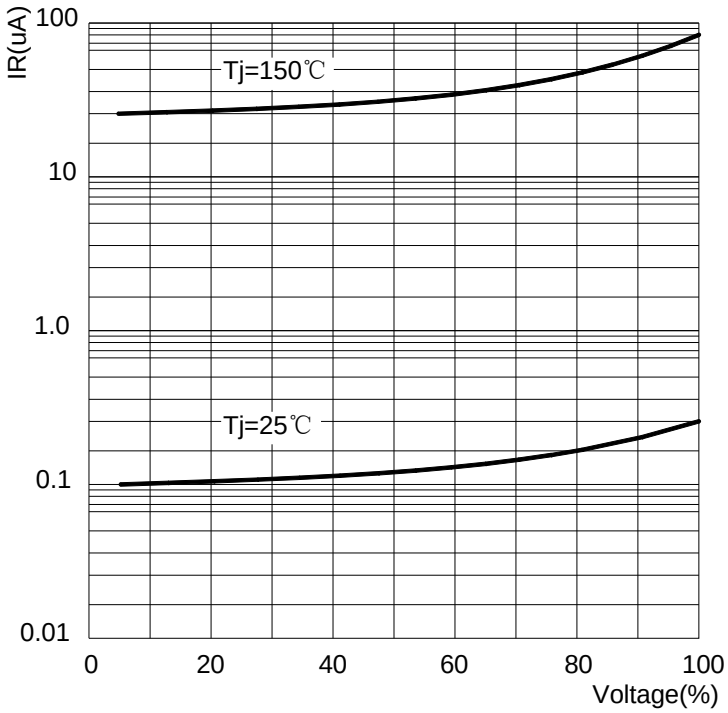



**FIG4:Typical Reverse Characteristics**



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## Ordering Information :

| Device | Packing |
|---|---|
| Part Number-BP | Bulk: 2.0K/Ctn |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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