

| | |
|--|--|
| SILICON BRIDGE RECTIFIERS | REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 6.0 Amperes |
| <p>FEATURES</p> <ul style="list-style-type: none"> ● Rating to 1000V PRV ● Ideal for printed circuit board ● Low forward voltage drop, high current capability ● Reliable low cost construction utilizing molded plastic technique results in inexpensive product ● The plastic material has U/L flammability classification 94V-0 | <div style="text-align: center; margin-bottom: 10px;"> KBJ </div> <p style="text-align: center;">Dimensions in inches and (millimeters)</p> |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave ,60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | KBJ6005 | KBJ601 | KBJ602 | KBJ604 | KBJ606 | KBJ608 | KBJ610 | UNIT | |
|---|-------------------|---------|--------|--------|--------|-------------|--------|--------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V _{RMS} | 30 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward Rectified Current (with heatsink Note 2) @ T _c =100°C (without heatsink) | I _(AV) | 6.0 | | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | | | | | 175 | | | | A |
| Maximum Forward Voltage at 3.0A DC | V _F | | | | | 1.0 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _J =25°C @ T _J =125°C | I _R | | | | | 10 | | | | uA |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | | | | | 120 | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | C _J | | | | | 55 | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJC} | | | | | 1.8 | | | | °C/W |
| Operating Temperature Range | T _J | | | | | -55 to +125 | | | °C | |
| Storage Temperature Range | T _{STG} | | | | | -55 to +150 | | | °C | |

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 2. Device mounted on 75mm*75mm*1.6mm cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

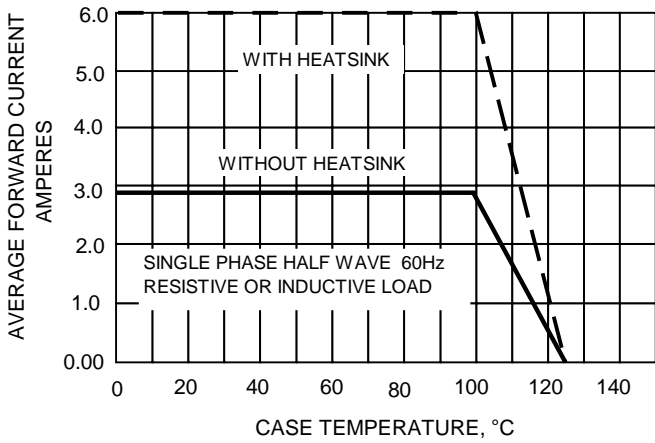


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

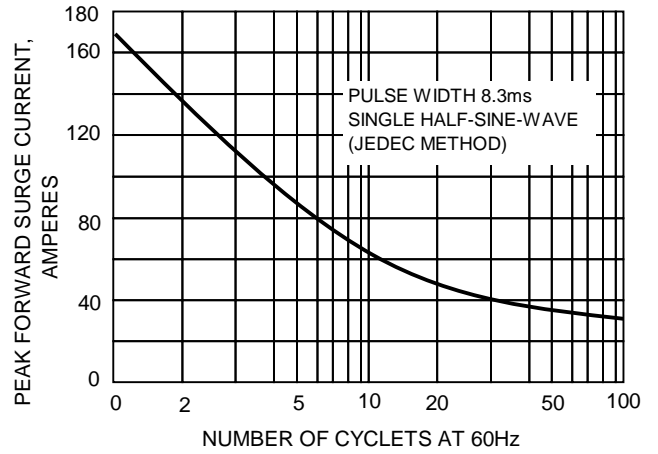


FIG.3-TYPICAL JUNCTION CAPACITANCE

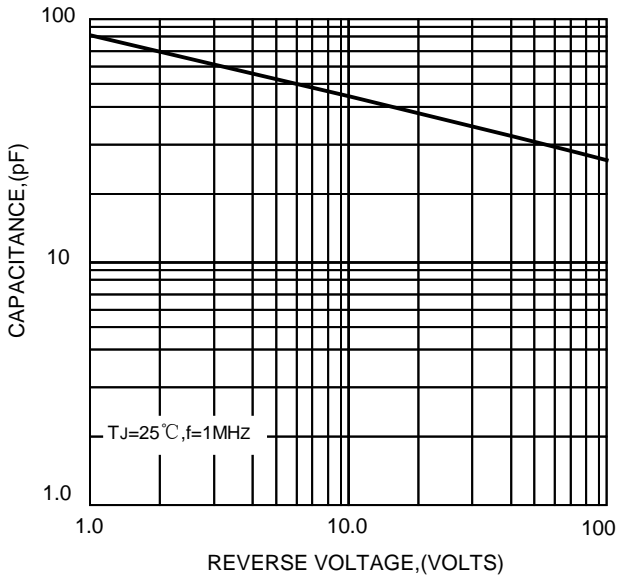


FIG.4-TYPICAL FORWARD CHARACTERISTICS

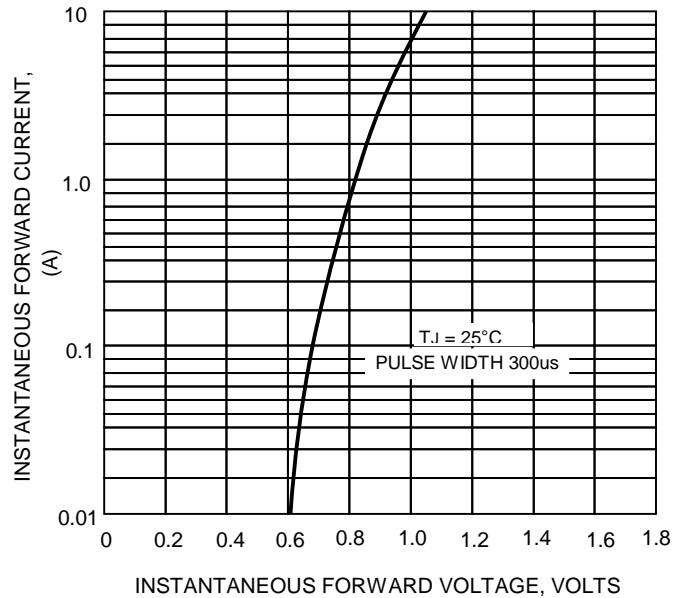


FIG.5-TYPICAL REVERSE CHARACTERISTICS

