

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **600** Volts
FORWARD CURRENT - **6.0** Amperes

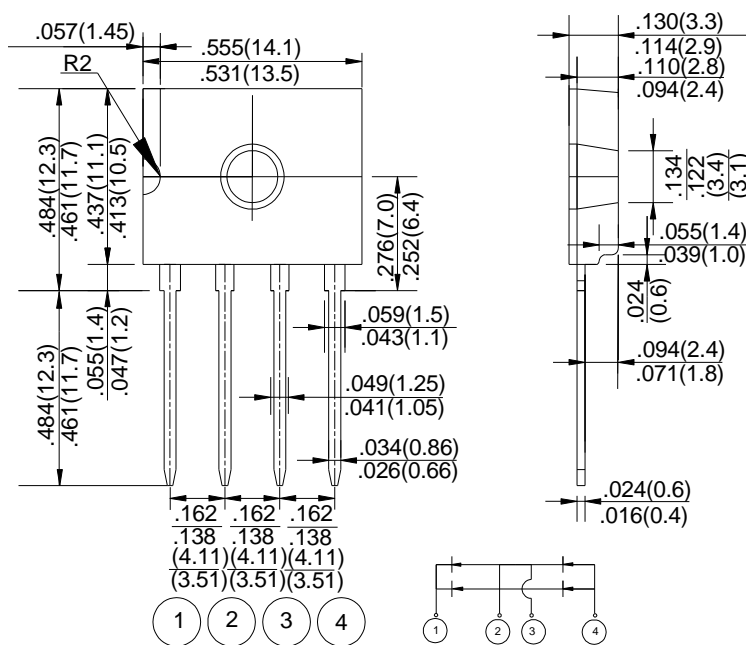
FEATURES

- Glass passivated chip junction
- High case dielectric strength
- High surge current capability
- Ideal for printed circuit board

MACHANICAL DATA

- Terminal: Plated leads solderable per MIL-STD 202E, Method 208C
- Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity: Polarity symbol marked on body
- Mounting position: any

D3K



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 | D6KB6U | UNIT |
|---|--------------------------------|-------------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 600 | V |
| Maximum RMS Voltage | V _{RMS} | 420 | V |
| Maximum DC Blocking Voltage | V _{DC} | 600 | V |
| Maximum Average Forward Rectified Output Current @ T _c =140°C (with heatsink) | I <sub(av)< sub=""></sub(av)<> | 6 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 150 | A |
| Typical Forward Voltage at 3.0A DC | V _F | 0.89 | V |
| Maximum Forward Voltage at 3.0A DC | V _F | 0.9 | V |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 93 | A ² s |
| Maximum Typical Thermal Resistance without heatsink | R _{θJa} | 55 | °C/W |
| with heatsink | R _{θJC} | 120 | |
| without heatsink | R _{θJL} | 15 | |
| Maximum DC Reverse Current @ T _a =25°C | I _R | 10.0 | μA |
| at Rated DC Blocking Voltage @ T _a =125°C | I _R | 500 | |
| Operating Temperature Range | T _J | -55 to +150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |

FIG.1-DERATING CURVE OUTPUT
RECTIFIED CURRENT

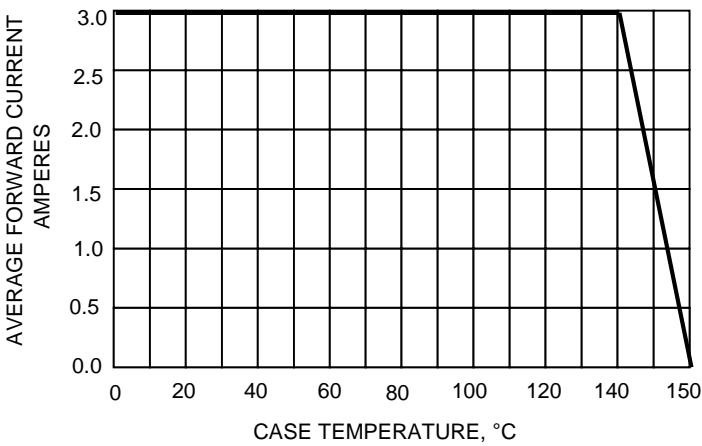


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

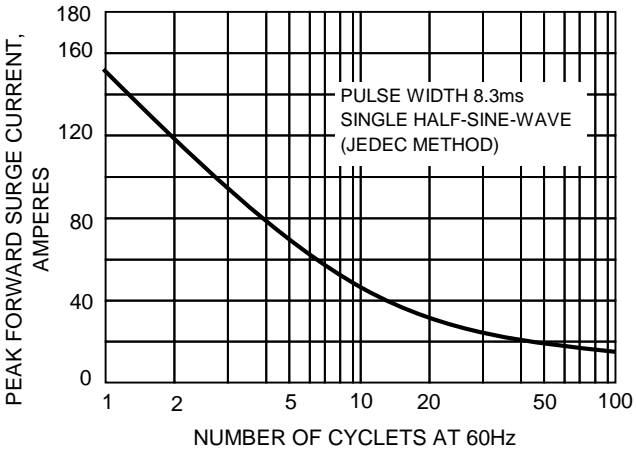


FIG.3-TYPICAL FORWARD CHARACTERISTICS

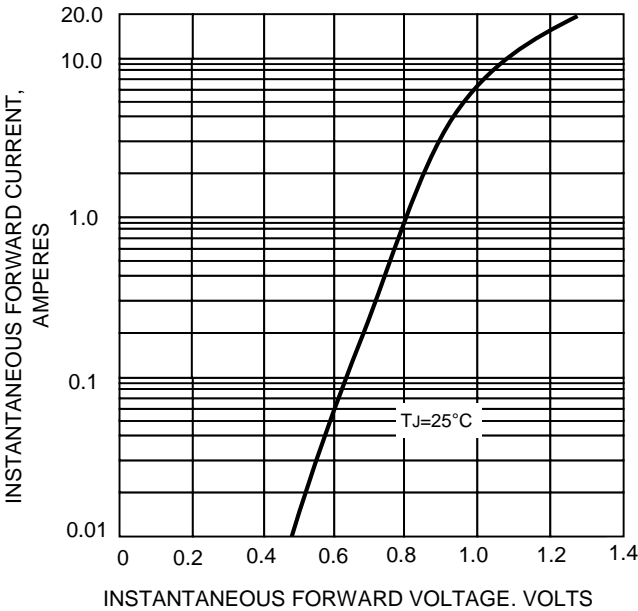


FIG.5-TYPICAL REVERSE CHARACTERISTICS

