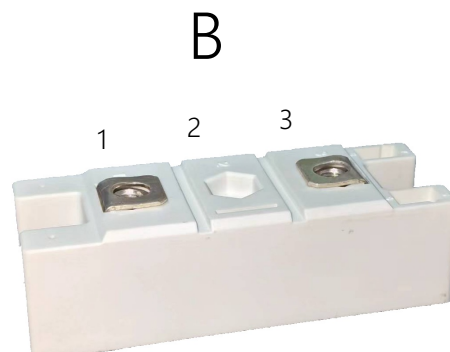


FEATURES

- Soft Reverse Recovery Characteristics
- Fast Reverse Recovery Time
- Low Reverse Recovery Loss
- Low Forward Voltage
- High surge capability
- Component in accordance to RoHS 2015/863/EU



MECHANICAL DATA

- Case: B
- Molding compound meets UL94V-0 flammability rating
- Polarity: As marked

TYPICAL APPLICATIONS

- Inversion Welder
- Uninterruptible Power Supply (UPS)
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- Power Factor Correction (PFC) Circuit

Circuit



ABSOLUTE MAXIMUM RATINGS

| Parameters | Symbol | Test conditions | Value | Unit |
|---|-----------------|---|-----------|----------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | | 1200 | V |
| Maximum Continuous forward current | I_F | $T_c=90^{\circ}\text{C}$ | 400 | A |
| Single pulse forward current | I_{FSM} | $t=8.3\text{ms, half sine}$ | 900 | A |
| RMS isolation voltage | V_{iso} | $AC, t=1\text{min}$ | 3000 | V |
| Maximum junction temperature | T_J | | 150 | $^{\circ}\text{C}$ |
| Maximum reverse recovery time | T_{rr} | $I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$ | 150 | nS |
| Storage temperture | T_{stg} | | -40 ~ 125 | $^{\circ}\text{C}$ |
| Power Dissipation | P_D | | 1130 | W |
| Thermal Resistance | $R_{\theta JC}$ | Junction-to-Case | 0.22 | $^{\circ}\text{C/W}$ |

ELECTRICAL CHARACTERISTICS

| Parameters | Symbol | Test conditions | Min | Typ | Max | Units |
|------------------------------------|--------|-------------------------------------|------|-----|-----|---------|
| Cathode to anodebreak down voltage | VBR | $I_R=100\mu A$ | 1200 | - | - | V |
| Forward voltage | VF | $I_F=400A$ $T_J=25^{\circ}C$ | | 1.7 | 2.3 | |
| | | $I_F=400A$ $T_J=125^{\circ}C$ | | - | 1.9 | |
| Reverse leakage current | IR | $V_R=V_{Rrated}$ $T_J=25^{\circ}C$ | | - | 200 | μA |
| | | $V_R=V_{Rrated}$ $T_J=125^{\circ}C$ | | - | 10 | mA |

FIG.1-TYPRCAL FORWARD CURRENT DERATING CURVE

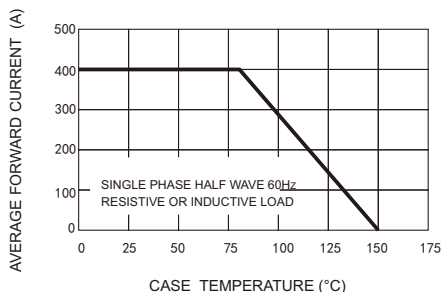


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

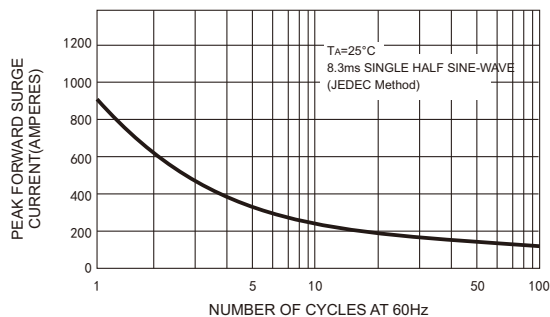


FIG4-TYPICAL FORWARD CHARACTERISTICS

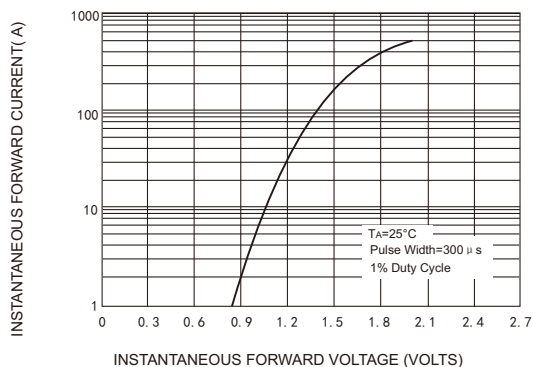
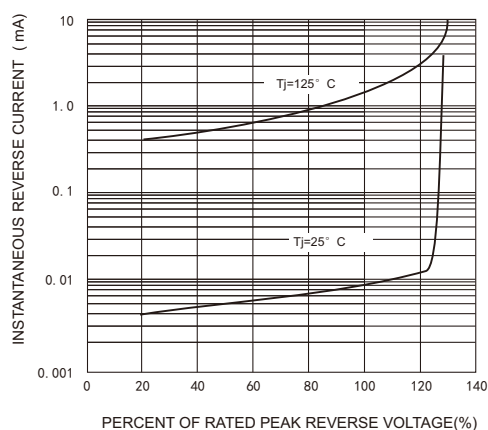
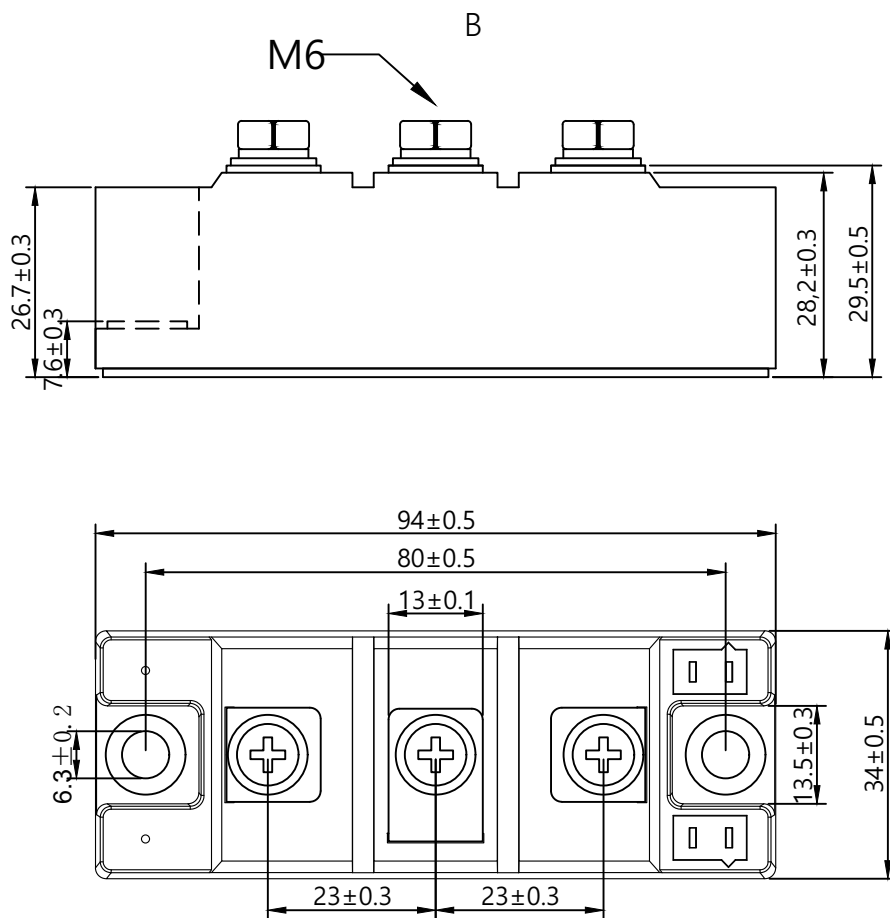


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Package Outline Information



Dimensions in mm

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