

**FEATURES**

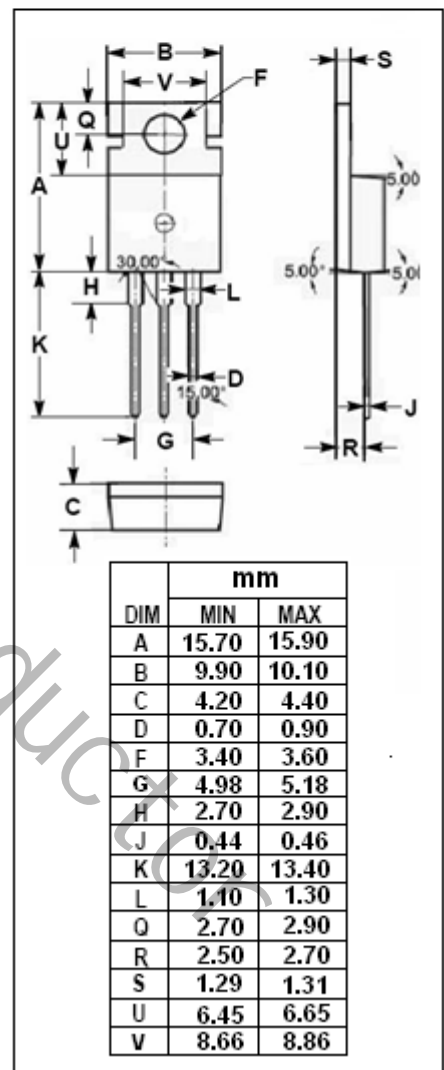
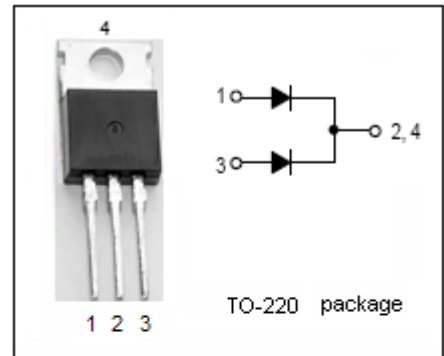
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

**MECHANICAL CHARACTERISTICS**

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- High Temperature Soldering Guaranteed: 250°C Max. for 10 Seconds

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

| SYMBOL             | PARAMETER  | VALUE   | UNIT |
|--------------------|--|---------|------|
| V <sub>RRM</sub>   | Peak Repetitive Reverse Voltage  | 60      | V    |
| V <sub>RMS</sub>   | RMS Voltage  | 42      |      |
| V <sub>R</sub>     | DC Blocking Voltage  | 60      |      |
| I <sub>F(AV)</sub> | Average Rectified Forward Current<br>T <sub>C</sub> = 100°C  | 30      | A    |
| I <sub>FSM</sub>   | Nonrepetitive Peak Surge Current<br>8.3ms single half sine-wave superimposed<br>on rated load conditions | 200     | A    |
| T <sub>J</sub>     | Junction Temperature   | -55~150 | °C   |
| T <sub>stg</sub>   | Storage Temperature Range  | -55~175 | °C   |
| dv/dt              | Voltage Rate of Change (Rated V <sub>R</sub> )   | 10,000  | V/μs |



**THERMAL CHARACTERISTICS**

| SYMBOL        | PARAMETER                            | MAX | UNIT |
|---------------|--------------------------------------|-----|------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.5 | °C/W |

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width  $\leq 300\ \mu s$ , Duty Cycle  $\leq 2\%$ )

| SYMBOL | PARAMETER                             | CONDITIONS  | MAX          | UNIT |
|--------|---------------------------------------|---|--------------|------|
| $V_F$  | Maximum Instantaneous Forward Voltage | $I_F = 30A; T_C = 25^\circ C$<br>$I_F = 30A; T_C = 125^\circ C$ | 0.95<br>0.85 | V    |
| $I_R$  | Maximum Instantaneous Reverse Current | Rated DC Voltage, $T_C = 25^\circ C$                            | 0.2          | mA   |