

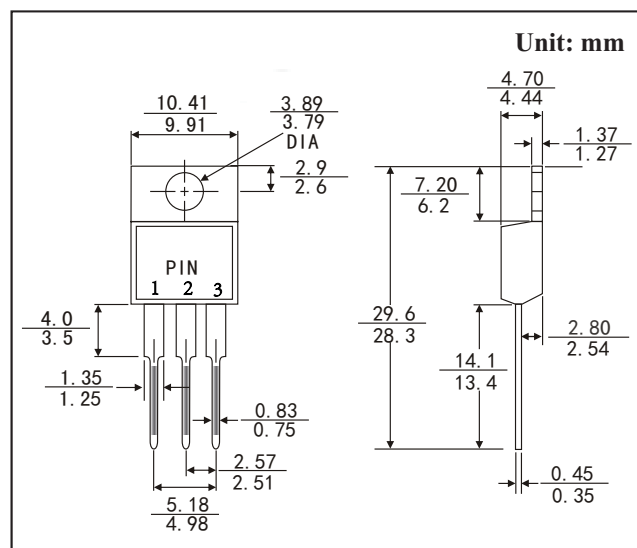
## TO-220AB Ultra-Fast Recovery Rectifier Diodes

### FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss, High Efficiency
- Ultrafast 35 and 60 Nanosecond Recovery times
- UL 94V-0 rate flame retardant
- Axial leads, solderable per MIL-STD-202 method 208 guaranteed

### MECHANICAL DATA

- Case style: TO-220AB molded plastic
- Mounting position: any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter                                                                                          | Symbol | Rating    | Unit |
|----------------------------------------------------------------------------------------------------|--------|-----------|------|
| Maximum Repetitive Peak Reverse Voltage                                                            | VRRM   | 400       | V    |
| Maximum RMS Voltage                                                                                | VRMS   | 280       | V    |
| Maximum DC Blocking Voltage                                                                        | VDC    | 400       | V    |
| Maximum Average Forward Rectified Current                                                          | IF     | 16        | A    |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | IFSM   | 100       | A    |
| Maximum Instantaneous Forward Voltage @8A                                                          | VF     | 1.3       | V    |
| Maximum Reverse Current @ Rated VR TA=25 °C<br>TA=125°C                                            | IR     | 10<br>500 | uA   |
| Typical Junction Capacitance (Note 1)                                                              | Cj     | 150       | pF   |
| Typical Thermal Resistance(Note 2)                                                                 | RθJA   | 30        | °C/w |
| Operating and Storage Temperature Range                                                            | TJ     | -65~+150  | °C   |
| Maximum reverse recovery time (Note 3)                                                             | Trr    | 50        | nS   |

NOTE1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C

NOTE2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

NOTE3. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.

## RATINGS AND CHARACTERISTIC CURVES

FIG1:  $I_o$  -  $T_c$  Curve

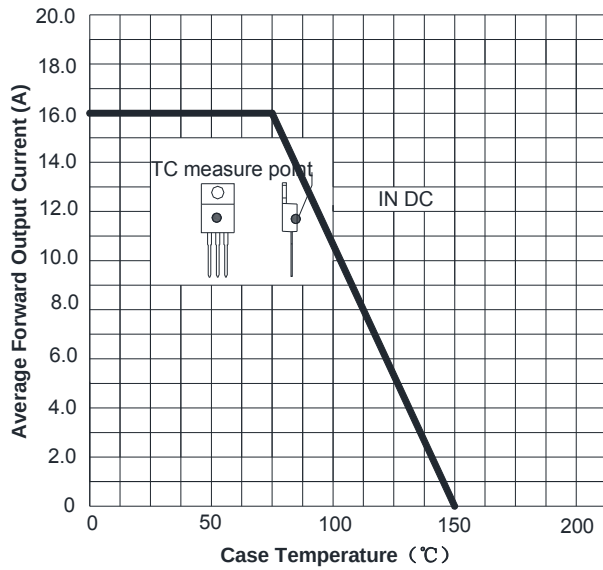


FIG2: Surge Forward Current Capability

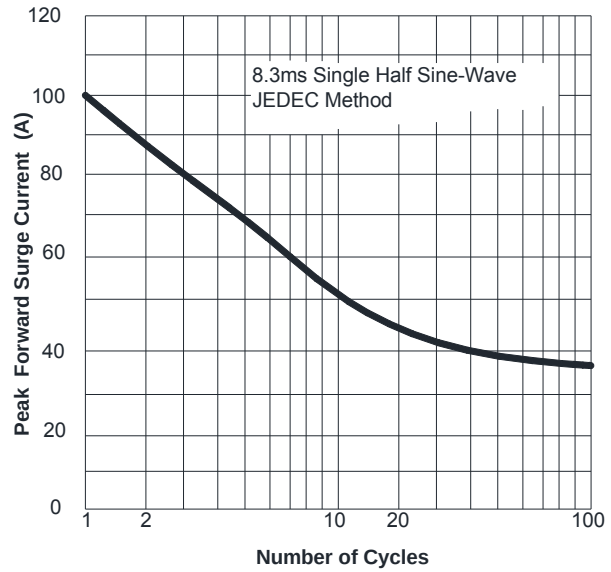


FIG3: Forward Voltage

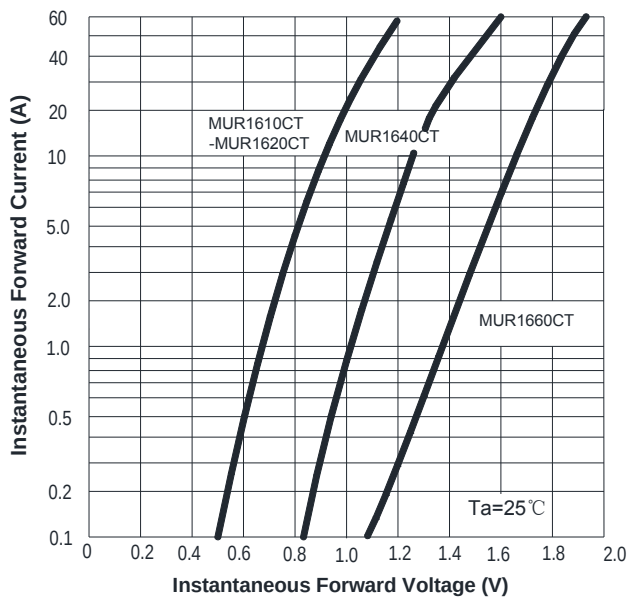


FIG4: Typical Reverse Characteristics

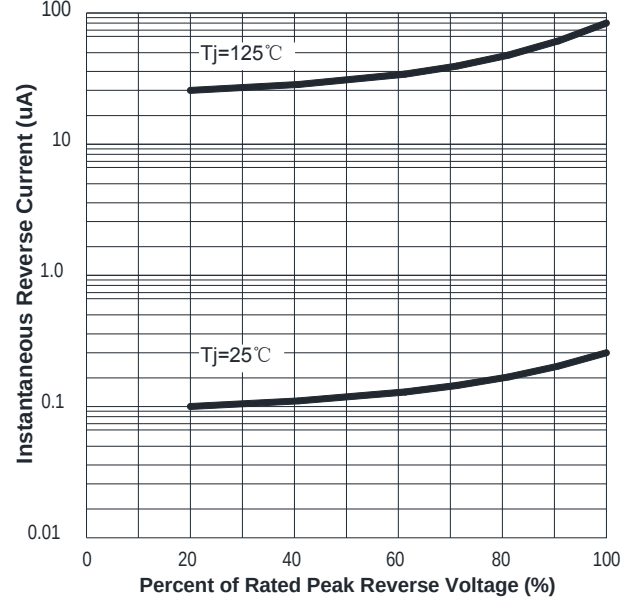


FIG5: Diagram of circuit and Testing wave form of reverse recovery time

