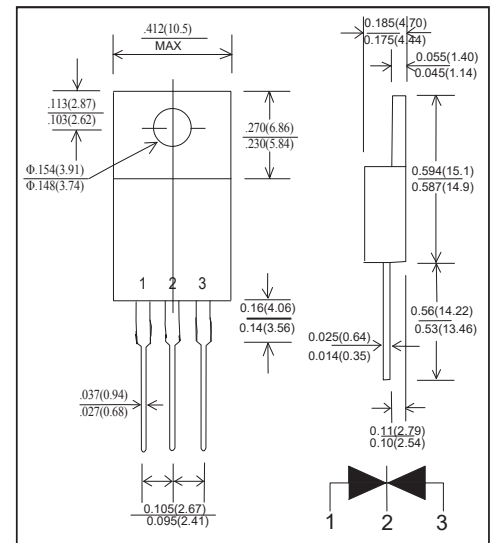


**TO-220AB SUPER FAST RECTIFIERS**
**FEATURES**

- 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	200	V
Maximum RMS Voltage	VRMS	140	V
Maximum DC Blocking Voltage	VDC	200	V
Maximum Average Forward Rectified Current	I <sub>F</sub>	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	1.0	V
Maximum Reverse Current @ Rated VR TA=25 °C TA=125°C	IR	10 500	uA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	150	pF
Typical Thermal Resistance(Note 2)	R <sub>θJA</sub>	30	°C/w
Operating and Storage Temperature Range	T <sub>J</sub>	-65 ~ + 150	°C
Maximum reverse recovery time (Note 3)	T <sub>rr</sub>	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 I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A. See figure 5.

## RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

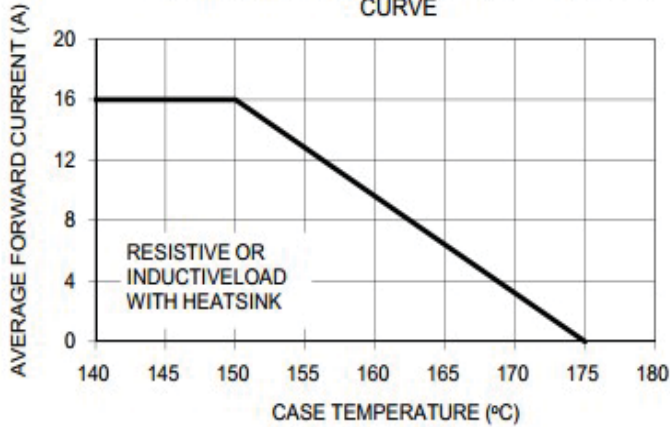


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

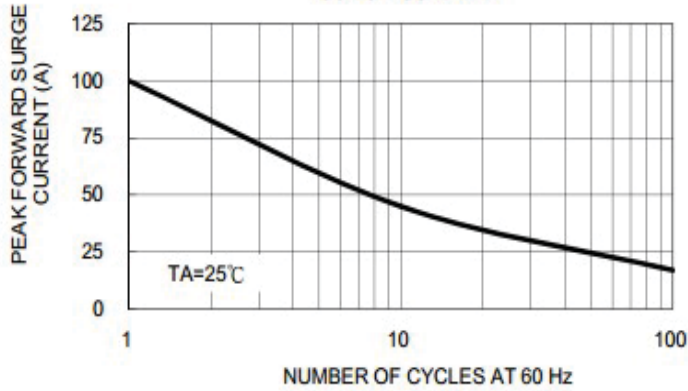


FIG. 5 TYPICAL JUNCTION CAPACITANCE

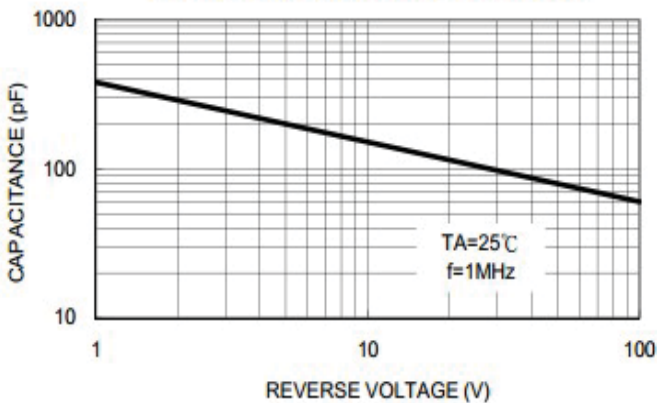


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

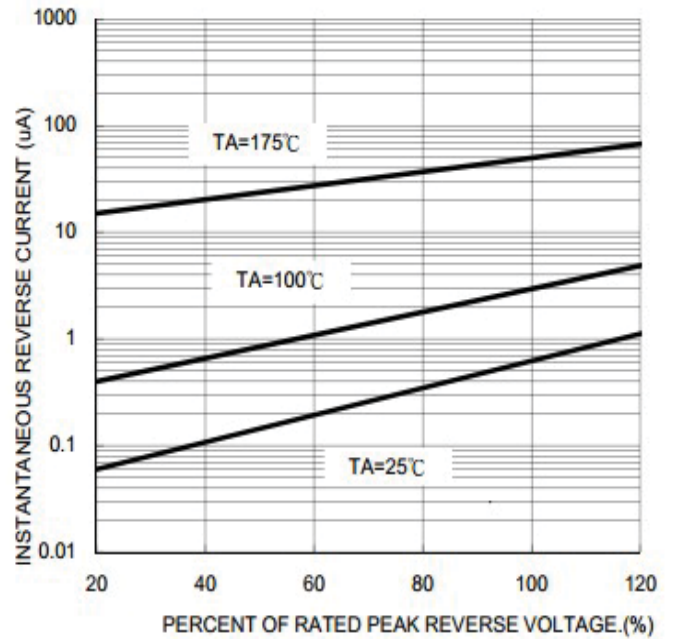


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

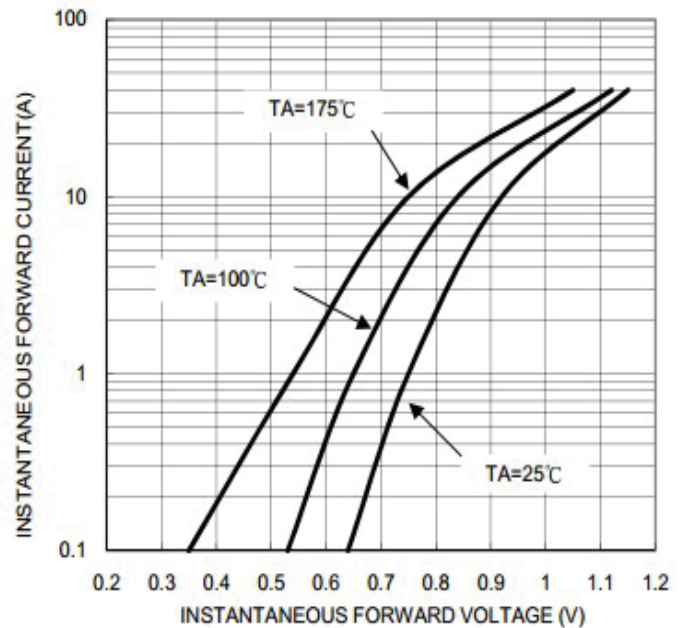


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM