

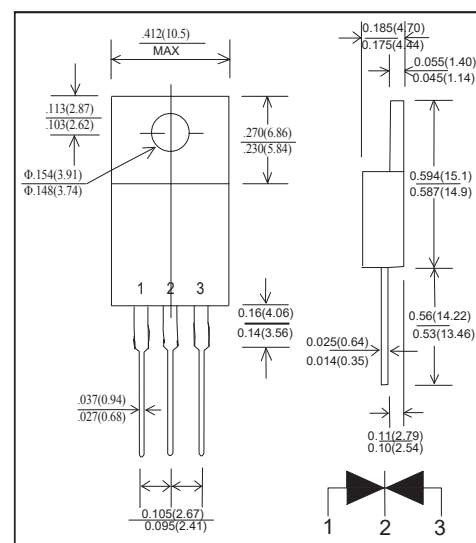
TO-220AB SUPER FAST RECTIFIERS

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	600	V
Maximum RMS Voltage	VRMS	420	V
Maximum DC Blocking Voltage	VDC	600	V
Maximum Average Forward Rectified Current	I _F	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	1.7	V
Maximum Reverse Current @ Rated VR TA=25 °C TA=125°C	IR	10 500	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 I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 5.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

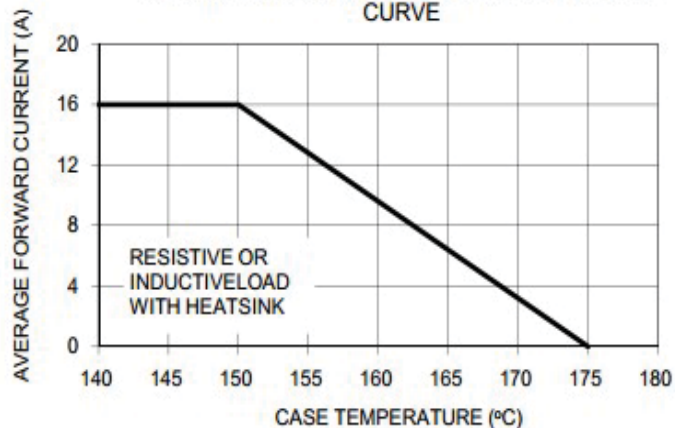


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

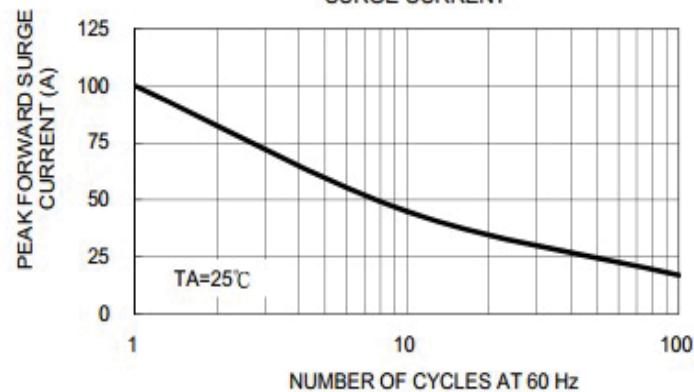


FIG. 5 TYPICAL JUNCTION CAPACITANCE

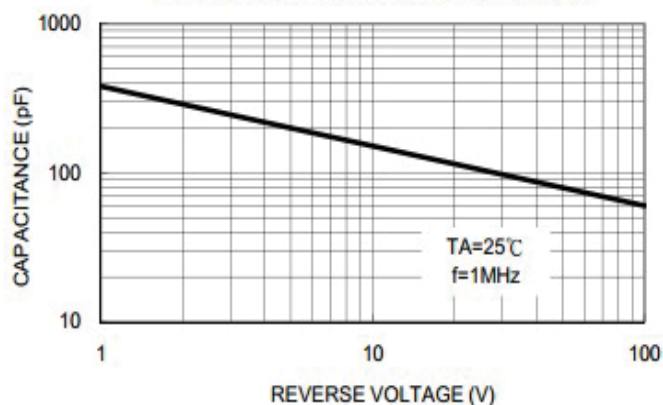


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

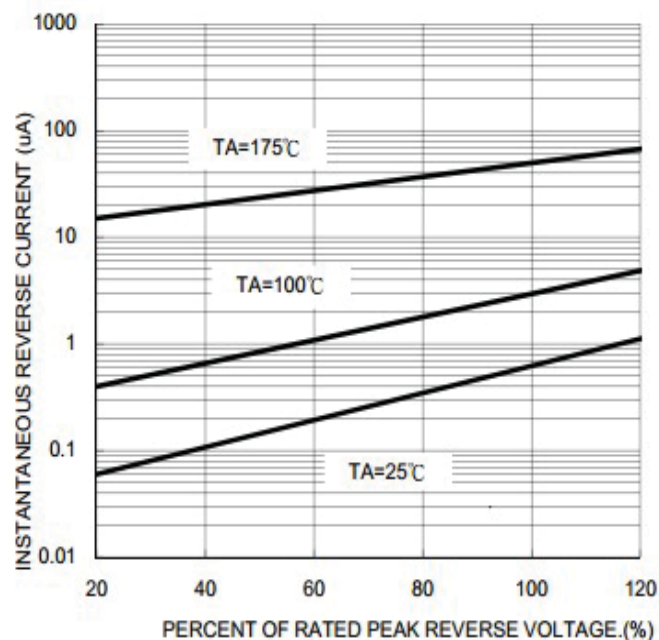


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

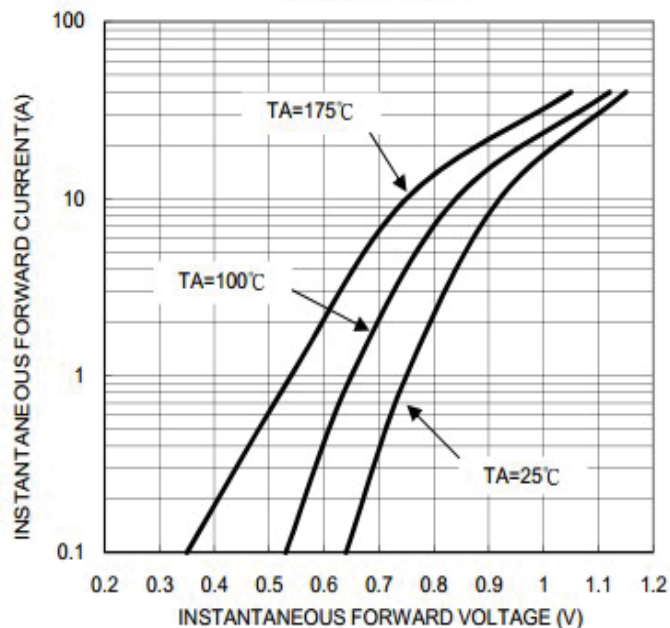


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM