

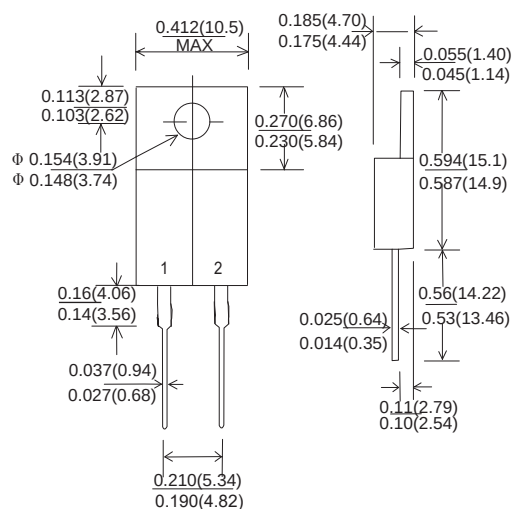
TO-220AC Ultra-Fast Recovery Rectifier Diodes

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss, High Efficiency
- Ultrafast 35 and 60 Nanosecond Recovery times

MECHANICAL DATA

- Case: TO-220AC Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter		Symbol	MUR820	MUR840	MUR860	UNITS
Maximum recurrent peak reverse voltage		V_{RRM}	200	400	600	V
Maximum RMS voltage		V_{RMS}	140	280	420	V
Maximum DC blocking voltage		V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	8.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	80.0			A
Maximum Instantaneous Forward Voltage at 4.0A		V_F	1.0	1.3	1.7	V
Maximum reverse current @ rated DC blocking voltage	@T _A =25℃	I_R	0.01			m A
	@T _A =125℃		0.5			
Maximum reverse recovery time (Note3)		t_{rr}	50			ns
Typical junction capacitance (Note1)		C_J	150			pF
Typical thermal resistance (Note2)		$R_{\theta JA}$	30			℃/W
Operating junction temperature range		T_j	-65 ---- + 150			℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

3. Reverse recovery condition $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

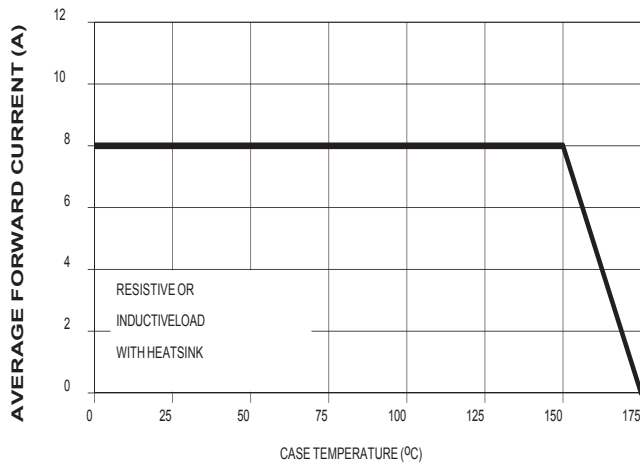


FIG.2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

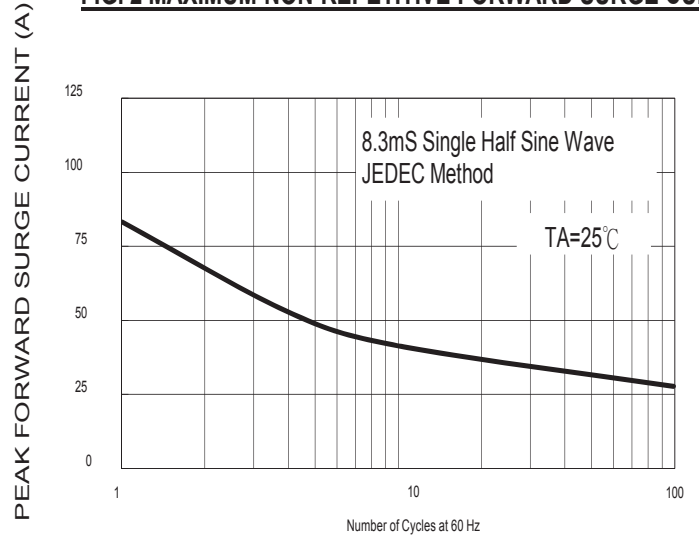


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

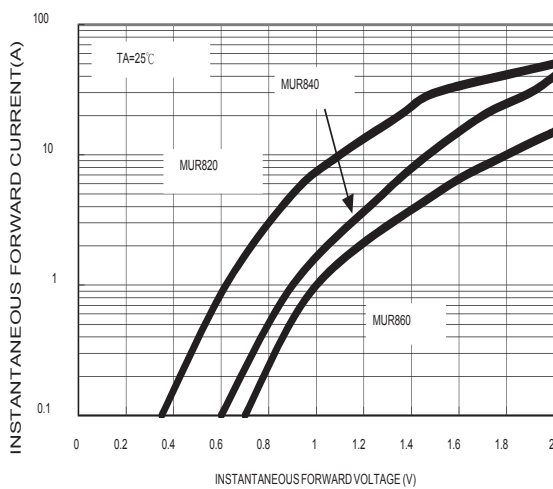


FIG.4 TYPICAL REVERSE CHARACTERISTICS

