



# MUR810F THRU MUR860F

Efficient Fast Recovery Rectifier

## Features

- \* Fast switching for high efficiency
- \* Low forward voltage drop
- \* High current capability
- \* Low reverse leakage current
- \* High surge current capability

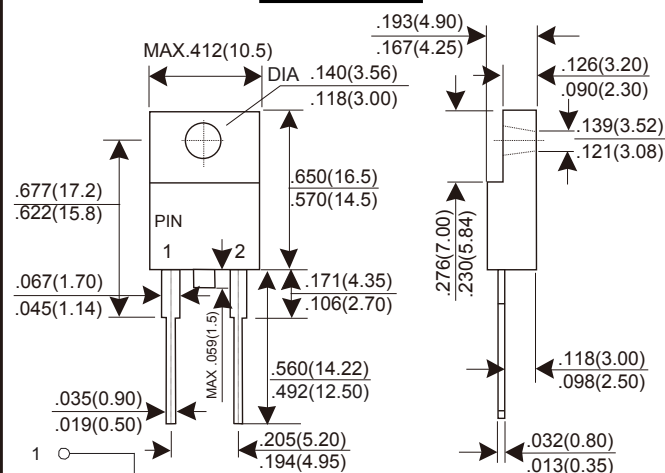
## Mechanical Data

- \* Case: Molded plastic, ITO-220AC
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-202, method 208
- \* Polarity: As marked
- \* Mounting position: Any

Voltage Range 100 to 600 V

Current 8.0 Ampere

### ITO-220AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	MUR810F	MUR815F	MUR820F	MUR840F	MUR860F	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	150	200	400	600	V
Maximum RMS voltage	$V_{RMS}$	70	105	140	280	420	V
Maximum DC blocking voltage	$V_{DC}$	100	150	200	400	600	V
Maximum average forward rectified current @ $T_C=87.5^\circ\text{C}$	$I_{F(AV)}$	8.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	125					A
Maximum instantaneous forward voltage @ $I_F=8.0\text{A}$	$V_F$	0.95		1.25		1.7	V
Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	$I_R$	10 500					$\mu\text{A}$
Maximum reverse recovery time (Note 1)	$t_{rr}$	35			50		ns
Typical thermal resistance from junction to case	$R_{\theta JC}$	2					$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150					$^\circ\text{C}$

NOTES : (1) Reverse recovery test conditions  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$ .

# RATINGS AND CHARACTERISTICS CURVES MUR810F THRU MUR860F

Fig.1 - Forward Current Derating Curve

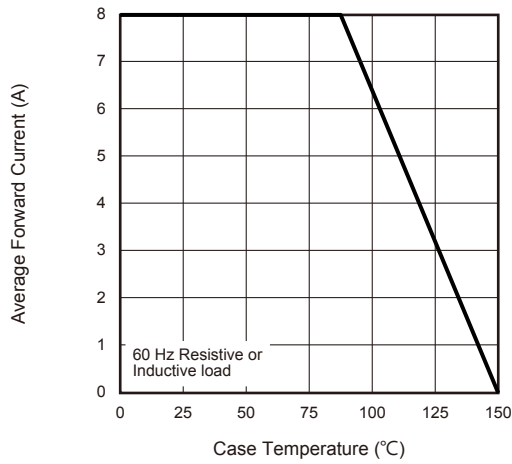


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

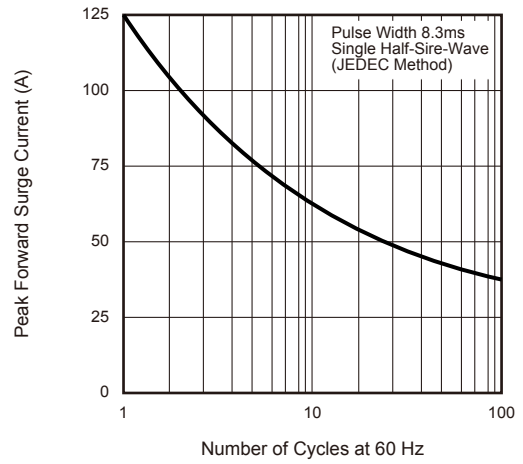


Fig.3 - Typical Instantaneous Forward Characteristics

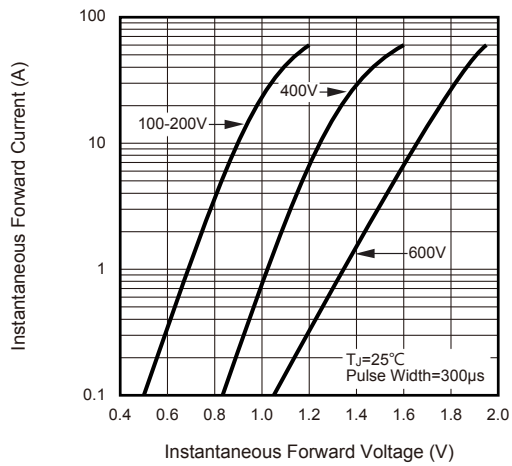


Fig.4 - Typical Reverse Leakage Characteristics

