



# MUR1010CF THRU MUR1060CF

Efficient Fast Recovery Rectifier

## Features

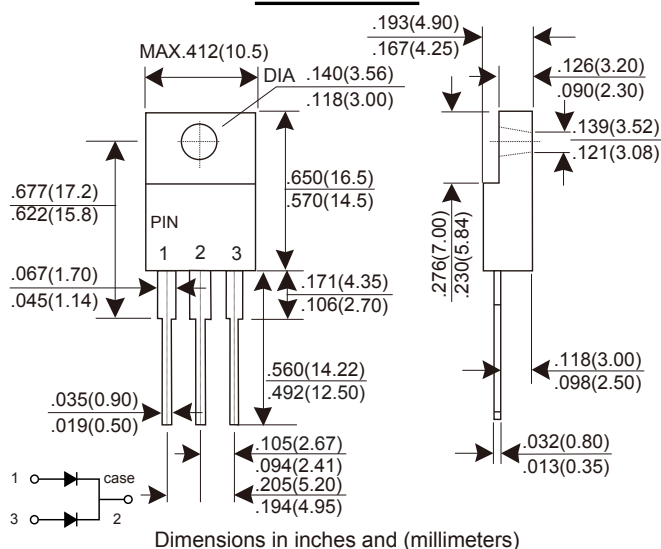
- \* Fast switching for high efficiency
- \* Low forward voltage drop
- \* High current capability
- \* Low reverse leakage current
- \* High surge current capability

## Mechanical Data

- \* Case: Molded plastic, ITO-220AB
- \* 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 10 Ampere**

### ITO-220AB



## 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	MUR 1010CF	MUR 1015CF	MUR 1020CF	MUR 1040CF	MUR 1060CF	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	150	200	400	600	V
Maximum RMS voltage	V <sub>RMS</sub>	70	105	140	280	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	100	150	200	400	600	V
Maximum average forward rectified current @T <sub>C</sub> =87.5°C	I <sub>F(AV)</sub>	10					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	55					A
Maximum instantaneous forward voltage @ I <sub>F</sub> =5.0A	V <sub>F</sub>	0.975		1.3		1.5	V
Maximum DC reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	10 500					μA
Maximum reverse recovery time (Note 1)	t <sub>rr</sub>	25			50		ns
Typical thermal resistance from junction to case	R <sub>θJC</sub>	2					°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150					°C

NOTES : (1) Reverse recovery test conditions I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A.

# RATINGS AND CHARACTERISTICS CURVES MUR1010CF THRU MUR1060CF

Fig.1 - Forward Current Derating Curve

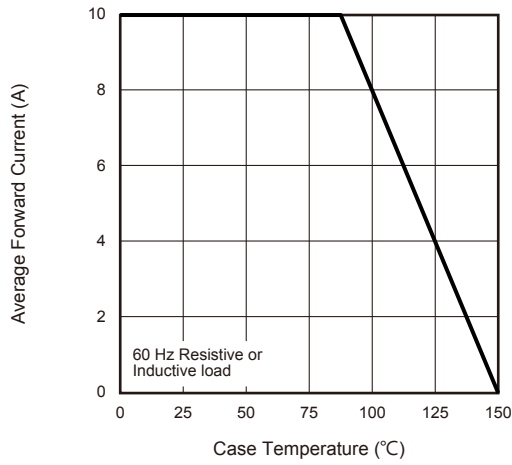


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

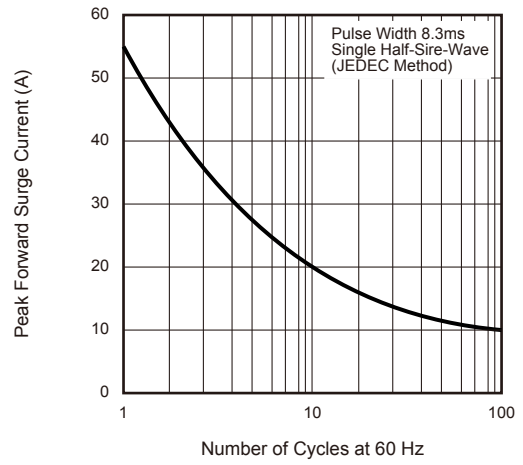


Fig.3 - Typical Instantaneous Forward Characteristics

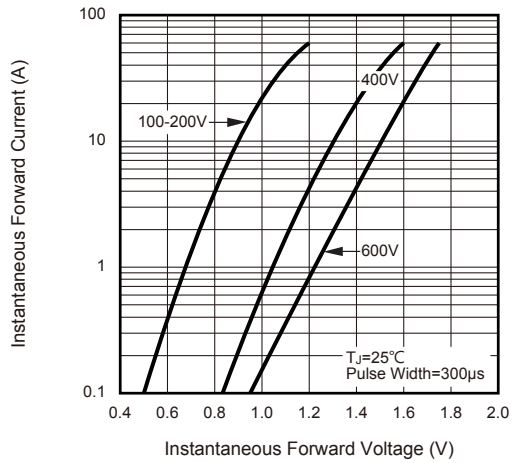


Fig.4 - Typical Reverse Leakage Characteristics

