



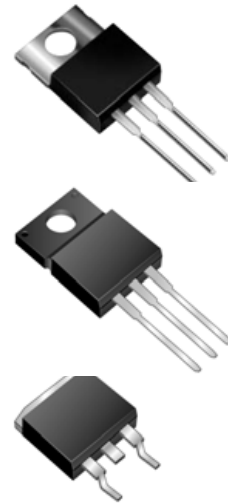
Glass Passivated Super Fast Rectifiers  
Reverse Voltage 50 to 600 Volts , Forward Current 8.0 Amperers

### Features

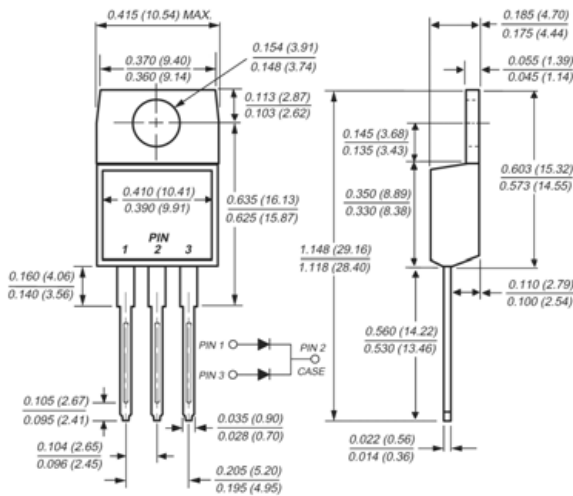
- ◆ Superfast switching time for high efficiency
- ◆ Low reverse leakage current
- ◆ High surge capacity

### Mechanical Data

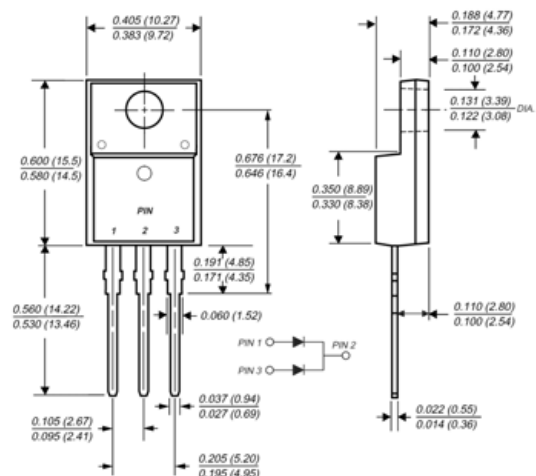
- ◆ Case: TO-220AB full molded plastic package
- ◆ Terminals: Lead solderable per MIL-STD-202, Method 208
- ◆ Polarity: As marked
- ◆ Standard packaging: Any
- ◆ Weight: 0.08 ounces, 2.24 grams



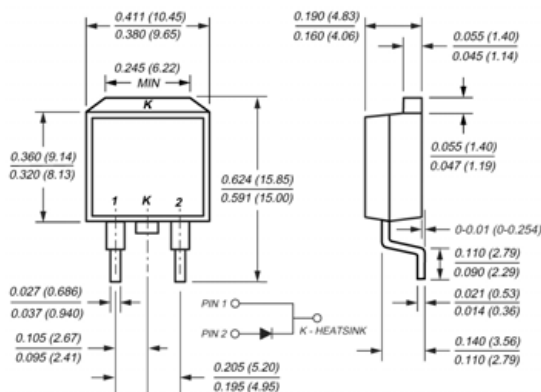
### TO-220AB



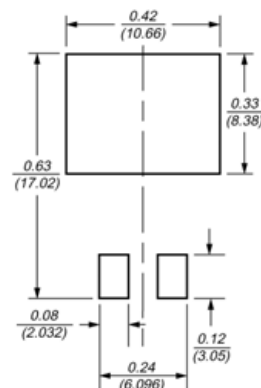
### TO-220F



### TO-263AB(D<sup>2</sup>PAK)



### Mounting Pad Layout TO-263AB



Dimensions in inches and (millimeters)



## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MUR805CT	MUR810CT	MUR820CT	MUR840CT	MUR860CT	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_C=120^\circ\text{C}$	$I_{F(AV)}$	8.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100.0					Amps
Maximum instantaneous forward voltage at 4.0A per element	$V_F$	2.2				2.8	Volts
Maximum DC reverse current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=100^\circ\text{C}$	$I_R$	10.0 800					$\mu\text{A}$
Maximum reverse recovery time at $I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{tr}=0.25\text{A}$	$t_{rr}$	30			50		nS
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150					°C

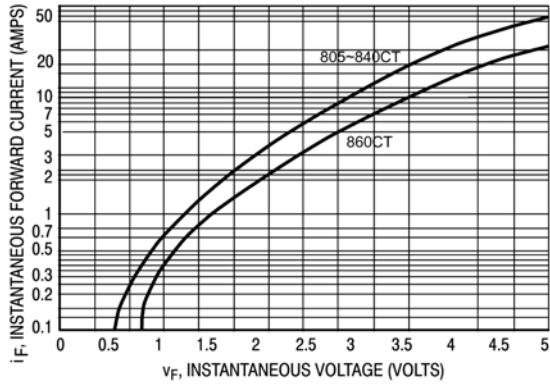
**Notes:** 1. Pulse test: Pulse width 300 usec, Duty cycle 2%



### RATINGS AND CHARACTERISTIC CURVES

(T<sub>A</sub> = 25°C unless otherwise noted)

Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics

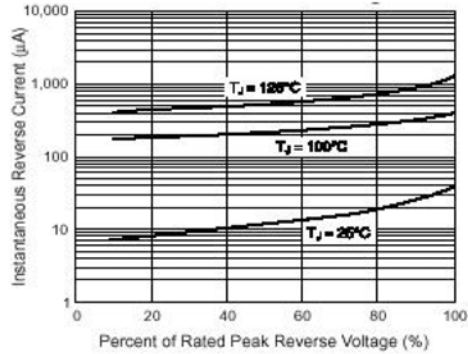
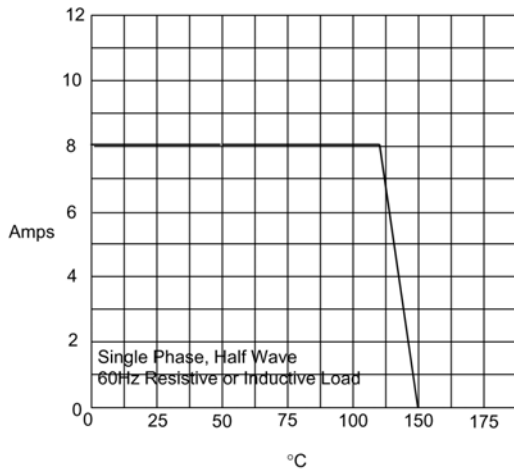
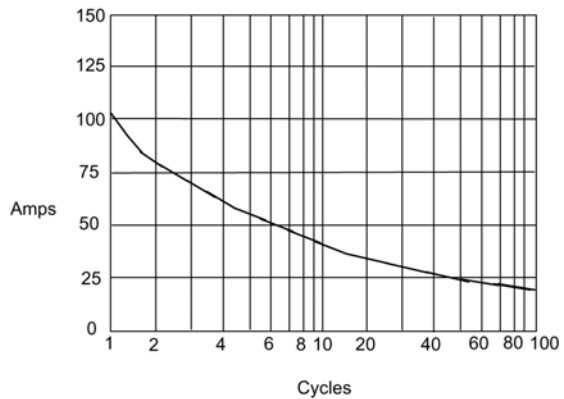


Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 4  
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles