

MUR805CT~MUR860CT

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

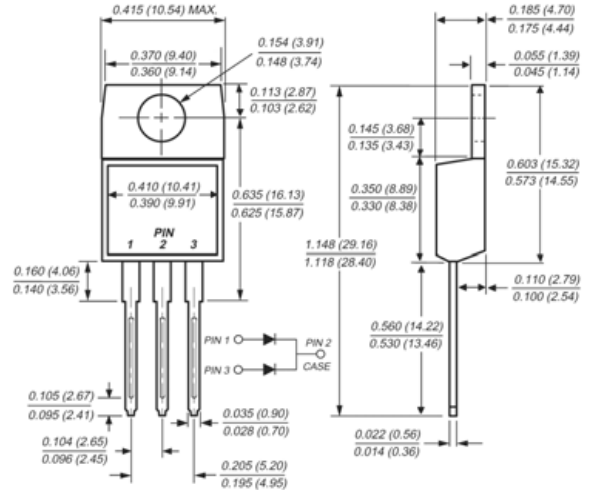
Features

- ◆ 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



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

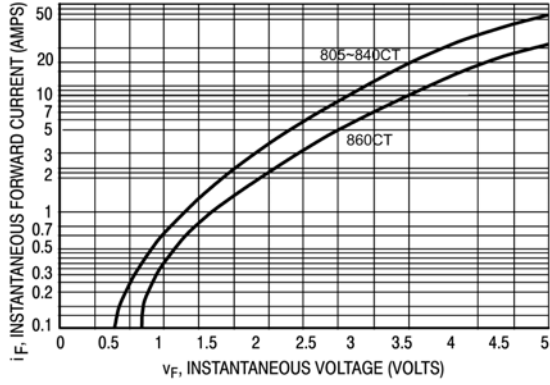
Parameter	Symbol	MUR805CT	MUR810CT	MUR820CT	MUR840CT	MUR860CT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_C=120^\circ\text{C}$	$I_{F(AV)}$	8.0					AmpsA
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0					mps
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					μA
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					$^\circ\text{C}$

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RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Figure 1
Typical Forward Characteristics



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

Figure 2
Typical Reverse Characteristics

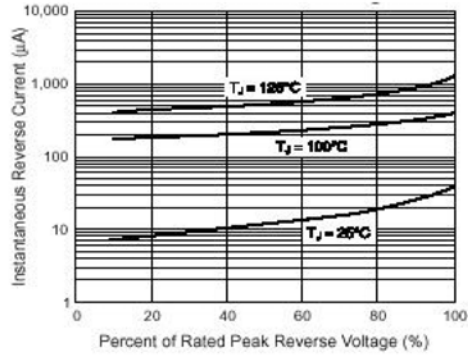
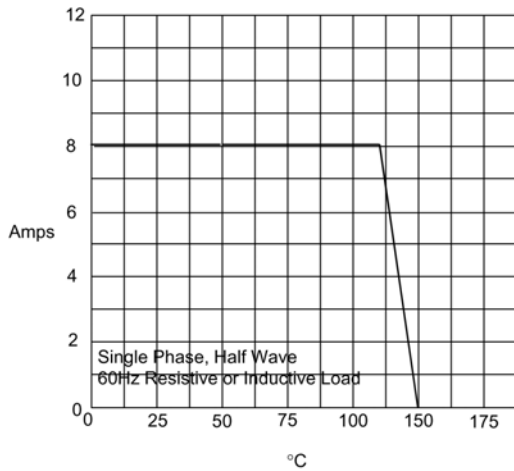
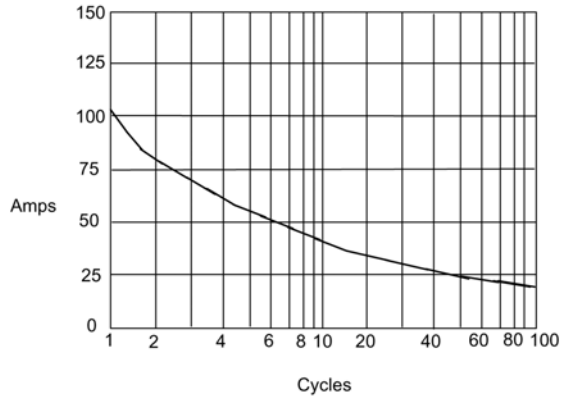


Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - $^\circ\text{C}$

Figure 4
Maximum Non-Repetitive Forward Surge Current



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