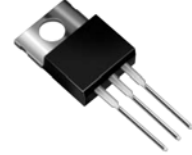


GLASS PASSIVATED SUPER FAST RECTIFIERS

PRODUCT SUMMARY

Reverse Voltage 50 to 600 Volts
Forward Current 8.0 Amperes



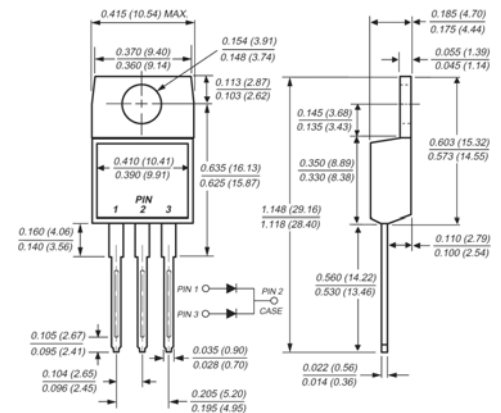
FEATURES

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



Pb-free; RoHS-compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified.)

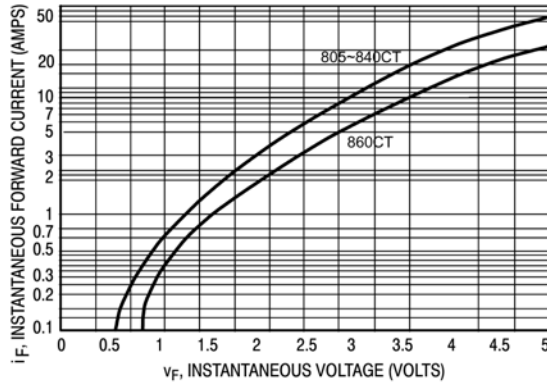
Parameter	Symbol	MUR805CT	MUR810CT	MUR820CT	MUR840CT	MUR860CT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current at $T_c=120^{\circ}\text{C}$	$I_{F(AV)}$	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					μA
Maximum reverse recovery time at $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_t=0.25\text{A}$	t_{rr}	30			50		nS
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150					$^{\circ}\text{C}$

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

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

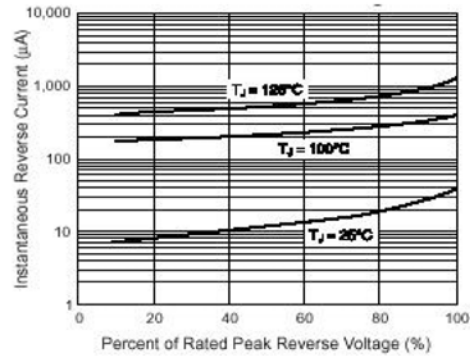
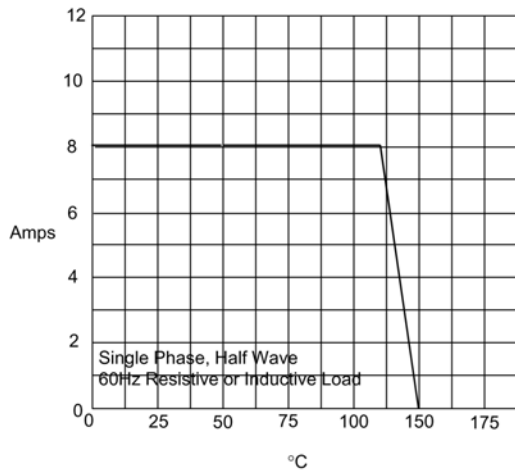
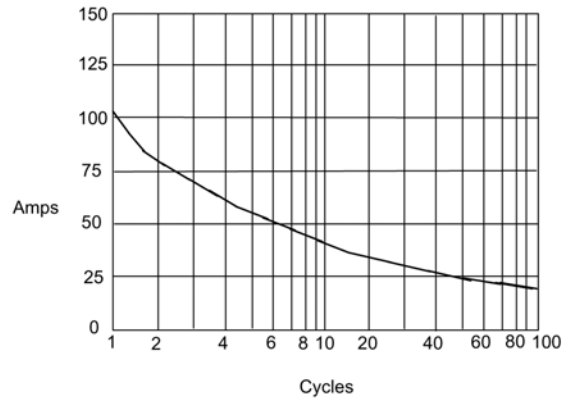


Figure 3
Forward Derating Curve



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

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