

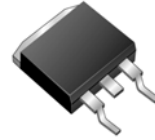


MURB805CT thru MURB860CT

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

Features

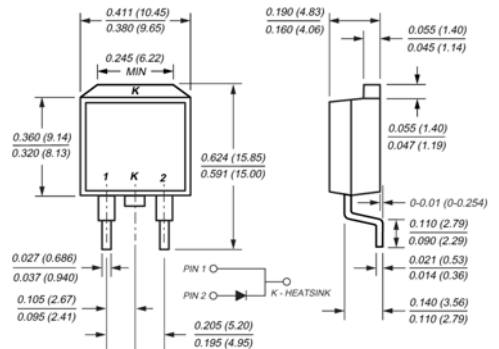
- ◆ High Current Capability
- ◆ Low Reverse Leakage
- ◆ Low Forward Voltage Drop
- ◆ High Current Capability
- ◆ Super Fast Switching Speed For High Efficiency



TO-263AB

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



Maximum Ratings and Electrical Characteristics

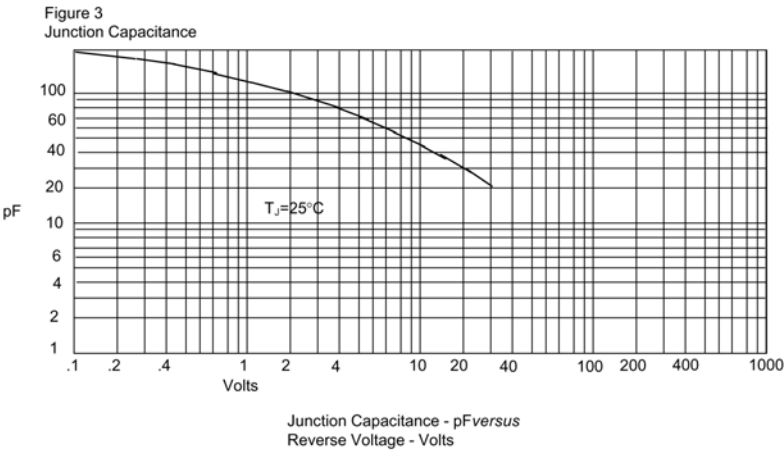
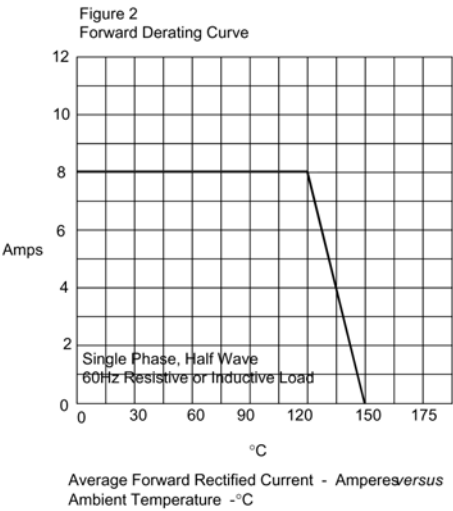
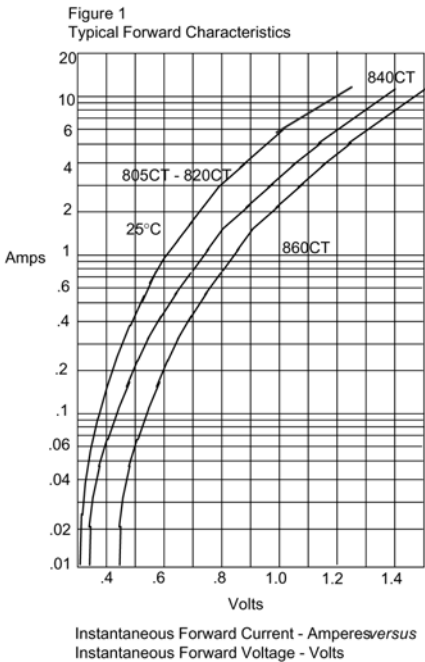
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MURB805CT	MURB810CT	MURB820CT	MURB840CT	MURB860CT	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 10.0A	V_F	1.25			1.5	1.75	Volts
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	10.0 800					μA
Maximum reverse recovery time at $I_F=1.0\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$	t_r	35			50	75	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

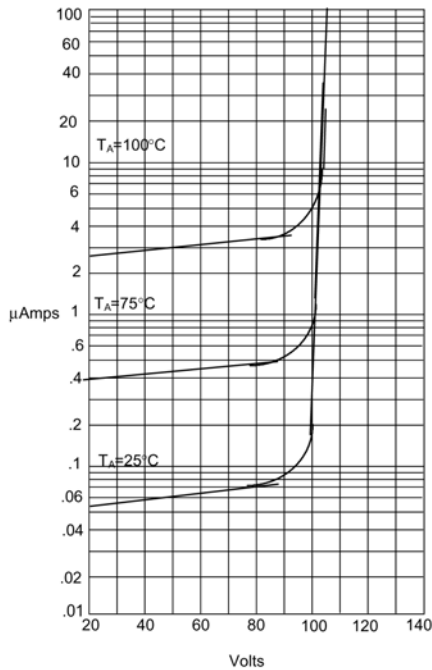
(T_A = 25°C unless otherwise noted)



RATINGS AND CHARACTERISTIC CURVES

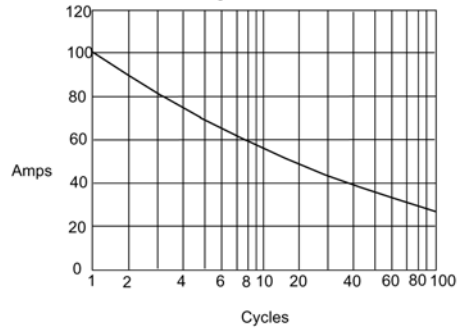
($T_A = 25^\circ\text{C}$ unless otherwise noted)

Figure 4
Typical Reverse Characteristics



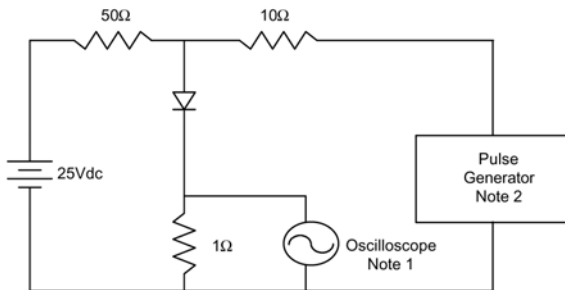
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



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

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram



Notes:

1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
2. Rise Time = 10ns max.
Source impedance = 50 ohms
3. Resistors are non-inductive

