



Micro Commercial Components  
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# MURHB805CT THRU MURHB860CT

## Features

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

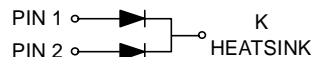
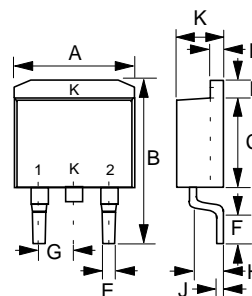
**8 Amp  
 Super Fast  
 Recovery Rectifier  
 50 to 600 Volts**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURHB805CT	50V	35V	50V
MURHB810CT	100V	70V	100V
MURHB820CT	200V	140V	200V
MURHB840CT	400V	280V	400V
MURHB860CT	600V	420V	600V

## D<sup>2</sup>PAK



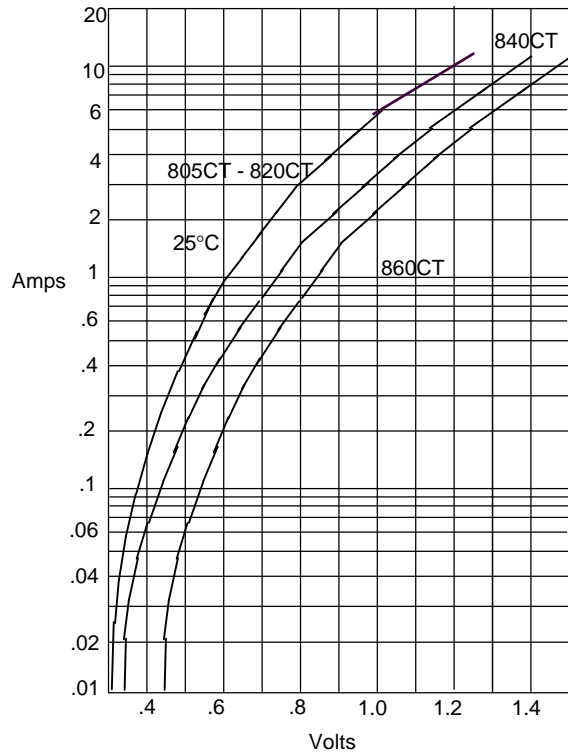
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8 A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	55A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 805CT- 820CT 840CT 860CT	$V_F$	1.25 V 1.5 V 1.75 V	$I_{FM} = 10A;$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	50µA 50µA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time 805CT- 820CT 840CT 860CT	$T_{rr}$	35ns 50ns 75ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.380	.421	9.65	10.69	
B	.575	.625	14.60	15.88	
C	.325	.364	8.25	9.25	
D	.045	.055	1.14	1.40	
E	.020	.045	0.51	1.14	
F	.090	.110	2.29	2.79	
G	.090	.110	2.29	2.79	
H	.080	.115	2.03	2.92	
I	.045	.055	1.14	1.40	
J	.012	.025	0.30	0.64	
K	.172	.190	4.37	4.83	

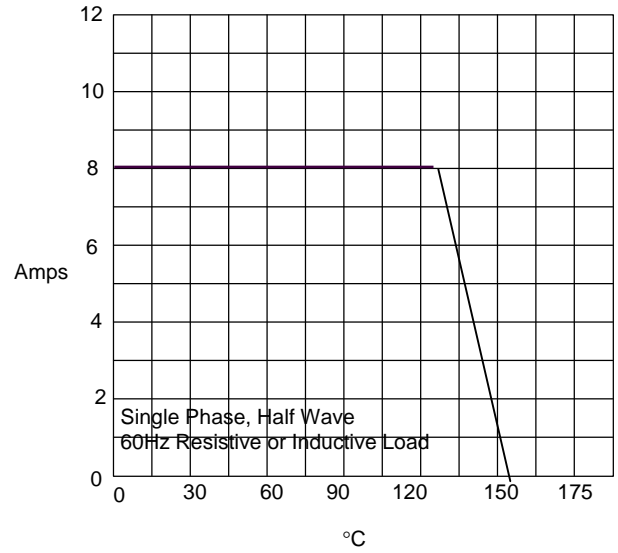
\*Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

Figure 1  
Typical Forward Characteristics



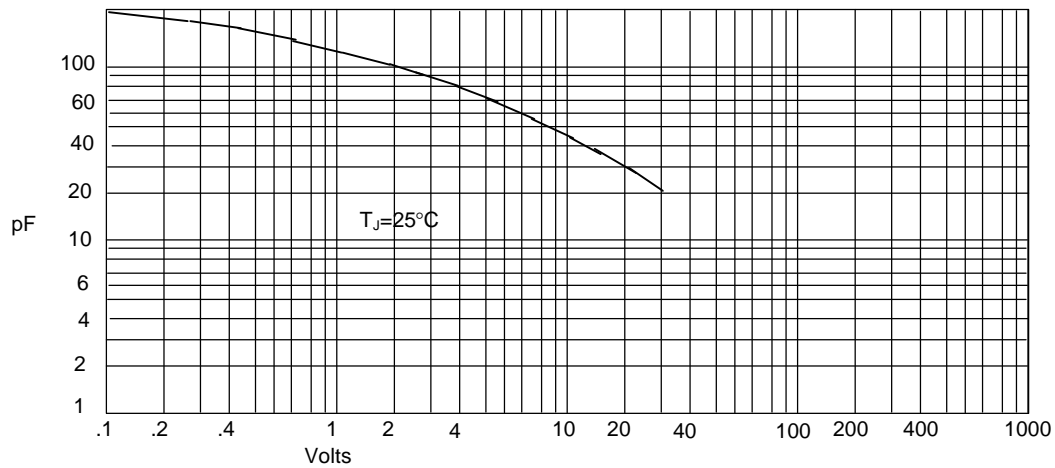
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

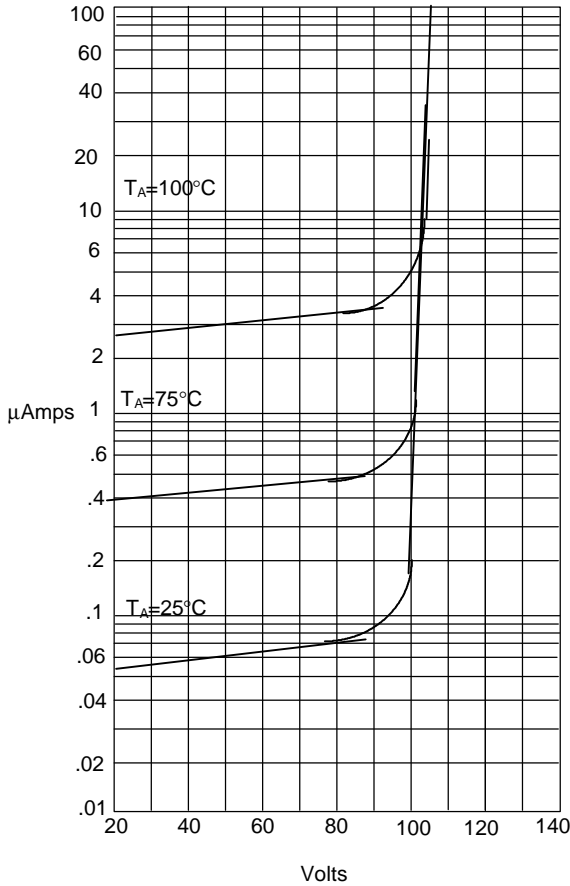
Figure 3  
Junction Capacitance



Junction Capacitance - pF versus  
Reverse Voltage - Volts

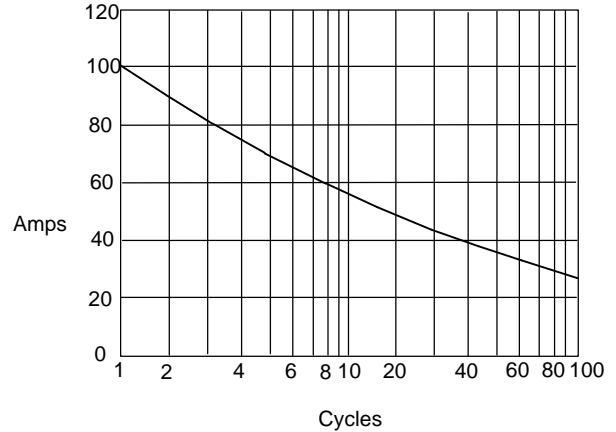
# MURHB805CT thru MURHB860CT

Figure 4  
Typical Reverse Characteristics



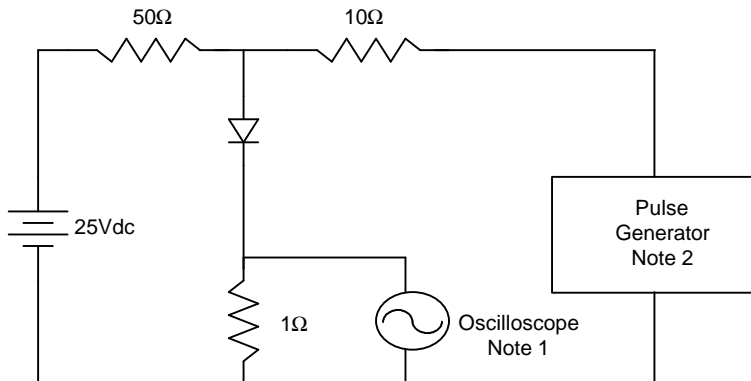
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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

