



Micro Commercial Components  
 21201 Itasca Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# MUR10005CT THRU MUR10060CT

## Features

- Supre Fast switching for high efficiency
- High Surge Capability
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability

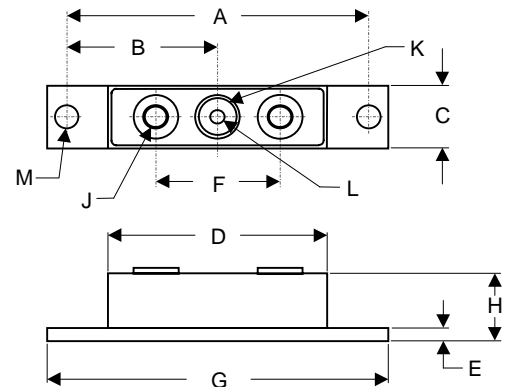
**100 Amp Supre Fast  
 Recovery Rectifier  
 50 to 600 Volts**

## Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR10005CT	50V	35V	50V
MUR10010CT	100V	70V	100V
MUR10020CT	200V	40V	200V
MUR10040CT	400V	280V	400V
MUR10060CT	600V	420V	600V

## FULL PACK



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	100 A	$T_L = 140^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 10005-10020 10040-10060	$V_F$	1.10V 1.35V	$I_{FM} = 50.0A$ ; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	25 $\mu$ A	$T_A = 25^\circ\text{C}$
Maximum Reverse Recovery Time 10005-10020 10040-10060	$T_{rr}$	50ns 75ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	$C_J$	240pF	Measured at 1.0MHz, $V_R=4.0V$

DIM	DIMENSIONS				NOTE
	INCH ES		MM		
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	1.565	1.585	39.75	40.26	
C	.700	.800	17.78	20.32	
E	.119	.132	3.02	3.35	
F	1.375	REF	34.92	REF	
G	3.55	3.65	90.17	92.71	
H	.590	.620	14.99	15.75	
J	1/4	UNF	FULL		
K	.380	.410	9.65	10.41	∅
L	.185	.195	4.70	4.95	∅
L	.275	.295	6.99	7.49	∅

\*Pulse Test: Pulse Width 300 $\mu$ sec, Duty Cycle 1%



Figure 1  
Typical Forward Characteristics

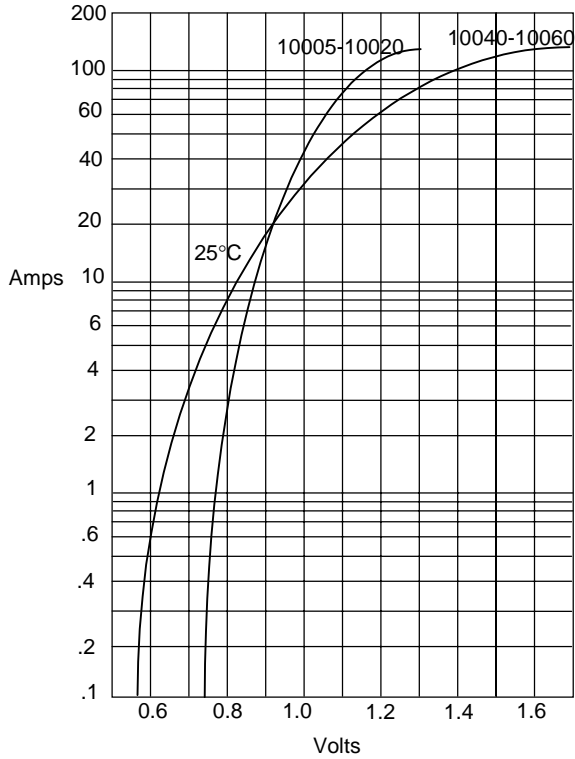


Figure 2  
Forward Derating Curve

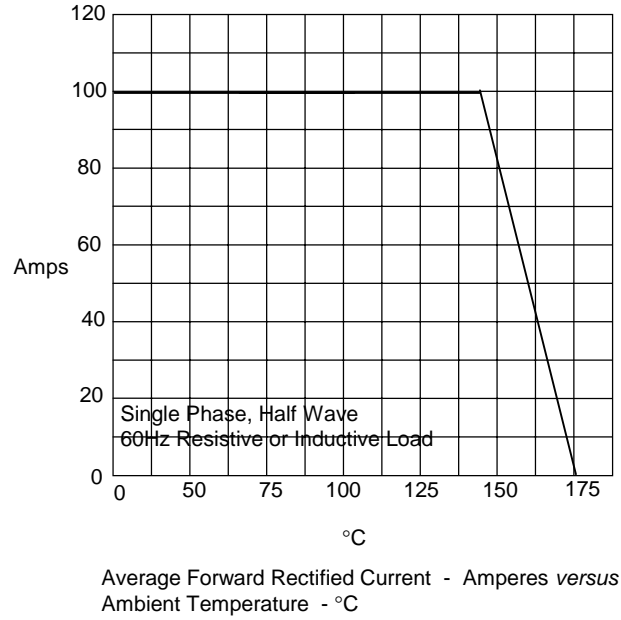


Figure 3  
Junction Capacitance

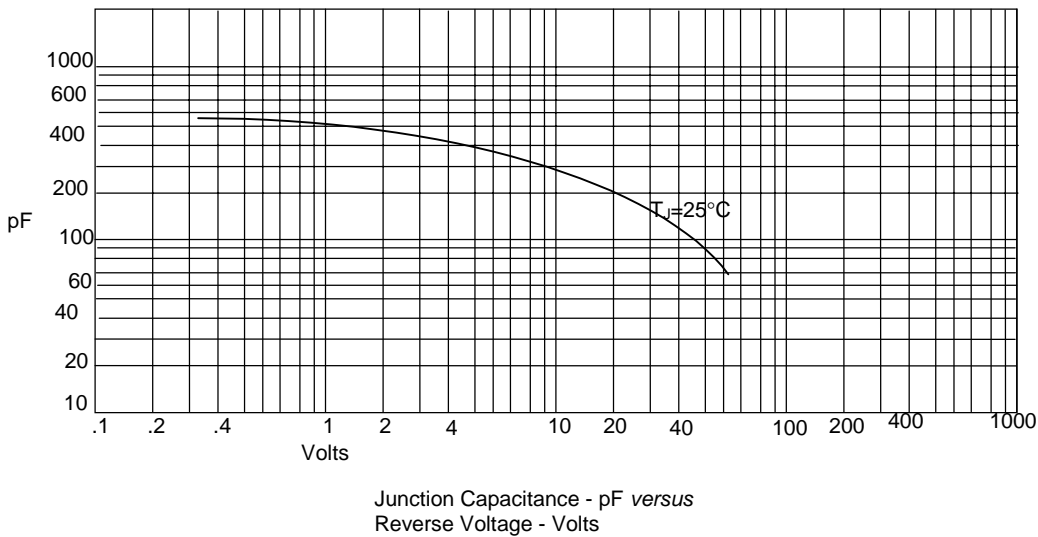
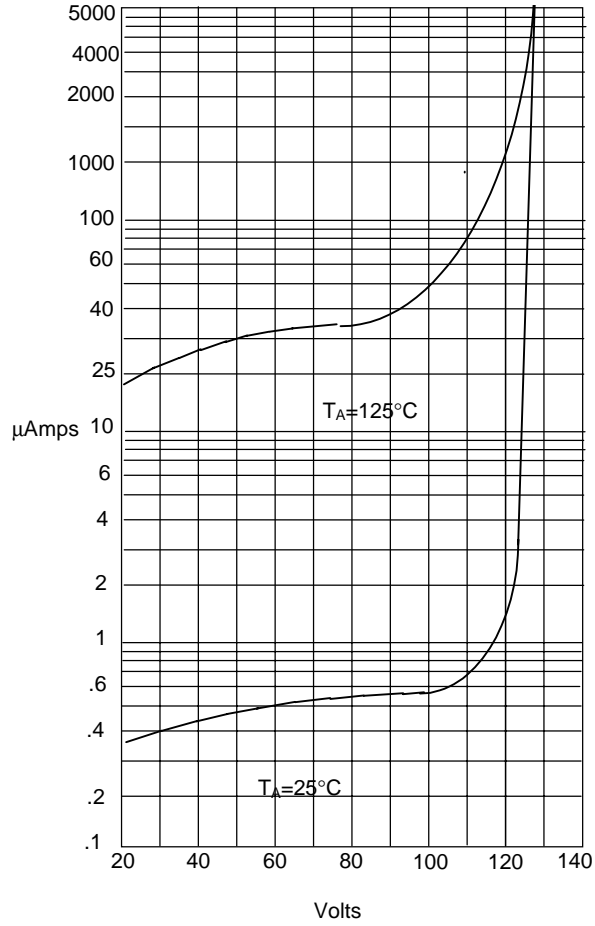
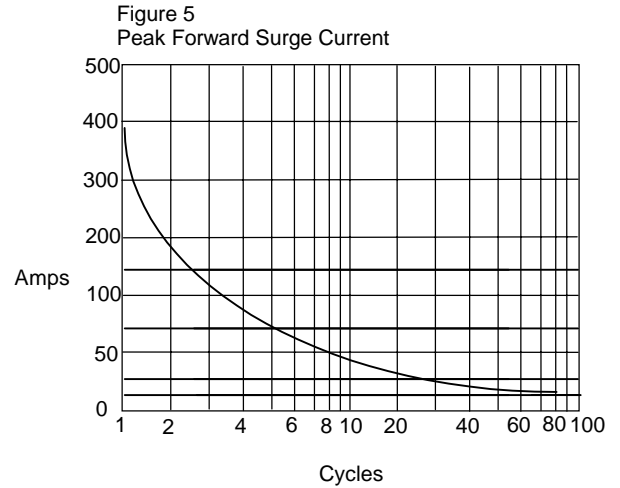




Figure 4  
Typical Reverse Characteristics



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



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