

## Super Fast Rectifier

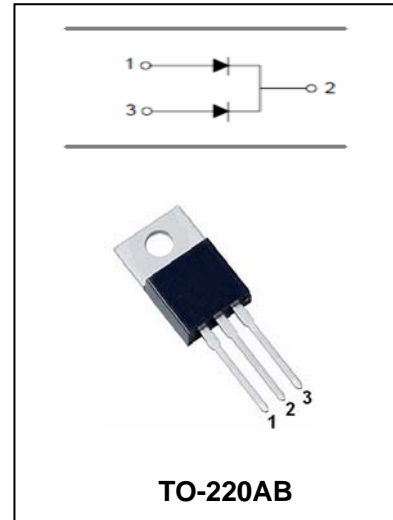
## MUR2010CT

### FEATURES

- Low Cost.
- Low Leakage.
- Low Forward Voltage Drop.
- High Current Capability.
- Easily Cleaned With Alcohol, Isopropanol and Similar Solvents.
- The Plastic Material Carries U/L Recognition 94V-0.



Lead-free



### MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR2010CT	Unit
$V_{RRM}$	Recurrnt Peak Reverse Voltage	100	V
$V_{RMS}$	RMS Voltage	70	V
$V_{DC}$	DC Blocking Voltage	100	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^{\circ}C$	20	A
$I_{FSM}$	Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimosed on Rated Load	125	A
$T_j T_{stg}$	Operating Junction and Storage Tem-perature Range	-55to+150	$^{\circ}C$

### ELECTRICAL CHARACTERISTICS @ $T_a=25^{\circ}C$ unless otherwise specified

Parameter	Symbol	Test conditions	MAX	UNIT
			MUR 2010CT	
Reverse Current	$I_R$	$V_R=V_{RRM}, T_A=25^{\circ}C$ $V_R=V_{RRM}, T_A=150^{\circ}C$	5.0 100	$\mu A$
Forward Voltage	$V_F$	$I_F=10A$	0.975	V
Reverse Recover Time	$t_{rr}$	$I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$	25	ns

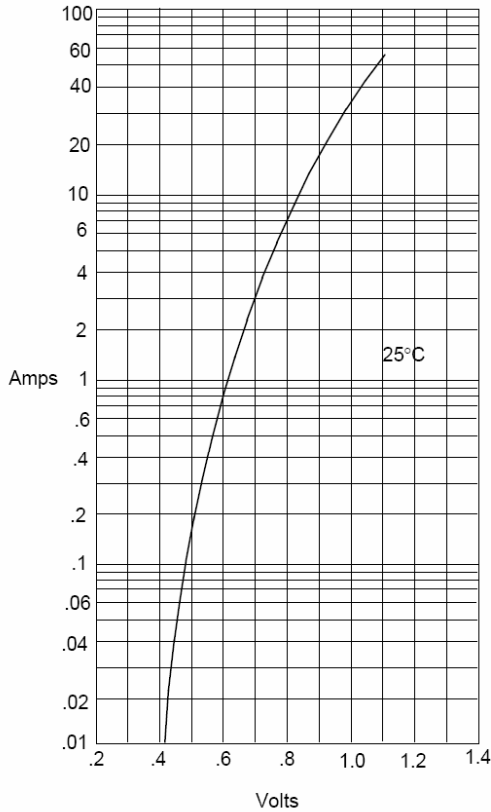


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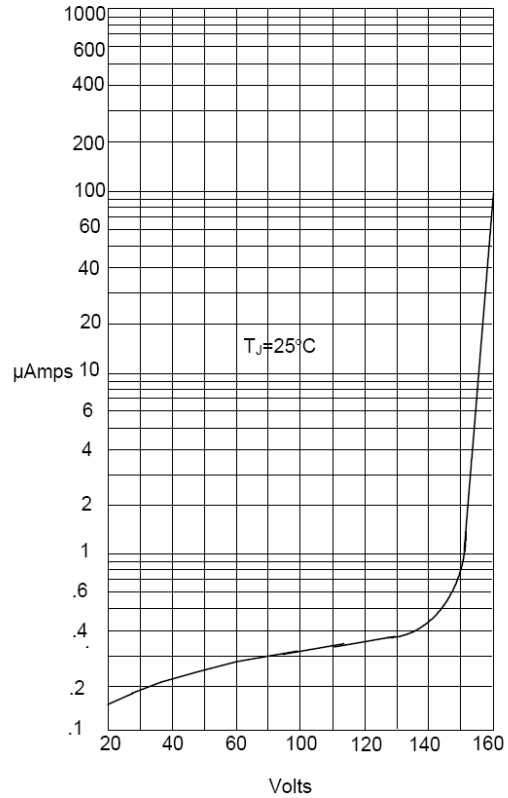
## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Figure 1  
Typical Forward Characteristics



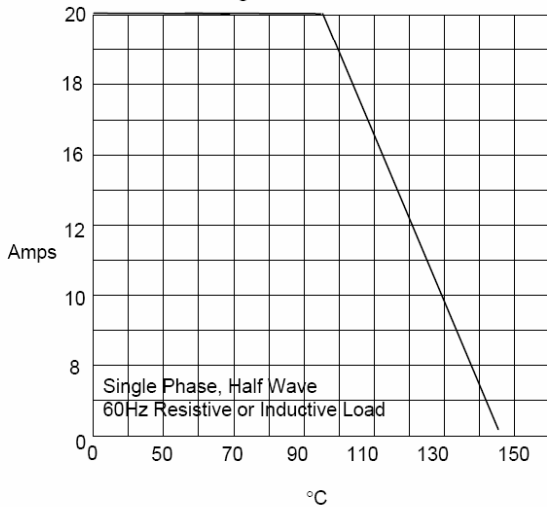
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



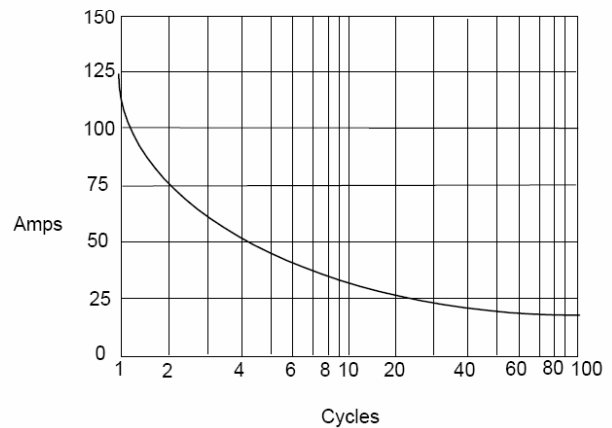
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Case Temperature - °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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**PACKAGE OUTLINE**

Plastic surface mounted package

TO-220AB

