



# THE DATASHEET OF MUR2020CT



# MUR2020CT/ MUR2020FCT

Super Fast Recovery Planar Rectifier  
 Reverse Voltage 200V Forward Current 20A

## Features

- FRED (Planar) wafer construction
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



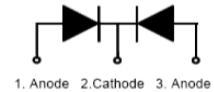
MUR2020CT  
 Package: TO-220-AB



MUR2020FCT  
 Package: ITO-220-AB

## Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.9grams(approximately)
- Finish: All external surfaces corrosion resistant and terminal leads are readily solderable
- Lead Temperature for Soldering Purposes: 260°C max. for 10 sec
- Shipped 50 units per plastic tube



## Maximum Ratings and Electrical Characteristics

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

PARAMETER	TEST CONDITIONS		SYMBOL	MUR2020(F)CT	UNIT
Maximum Repetitive Peak Reverse Voltage			$V_{RRM}$	200	V
Working Peak Reverse Voltage			$V_{RWM}$	200	V
Maximum DC Blocking Voltage			$V_{DC}$	200	V
Maximum Average Forward Rectified Current at $T_C=105^\circ\text{C}$ Total Device per Diode			$I_{F(AV)}$	20 10	A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load per diode)			$I_{FSM}$	125	A
Voltage Rate of Change(rated $V_R$ )			$DV/dt$	10000	V/us
Operating Junction Temperature Range			$T_J$	-55 to+150	$^\circ\text{C}$
Storage Temperature Range			$T_{STG}$	-55 to+150	$^\circ\text{C}$
Maximum Reverse Recover Time ( $I_F=0.5A$ , $I_R=1.0A$ , $I_{rec}=0.25A$ )			$T_{rr}$	35	ns
Maximum Instantaneous Forward Voltage per Leg	$I_F=10A$ $I_F=10A$	$T_C=25^\circ\text{C}$ $T_C=125^\circ\text{C}$	$V_F$	1.10 1.00	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$		$I_R$	10 500	$\mu\text{A}$
<b>Thermal Characteristics <math>T_A=25^\circ\text{C}</math> unless otherwise noted</b>					
Symbol	Parameter		TYP.(TO-220-AB)	TYP.(ITO-220-AB)	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case per Leg		2.0	4.0	$^\circ\text{C/W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient per Leg		62.5	62.5	$^\circ\text{C/W}$

**Note:** Pulse test:300us pulse width, duty cycle=2%

# MUR2020CT/ MUR2020FCT

Super Fast Recovery Planar Rectifier  
 Reverse Voltage 200V Forward Current 20A

## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

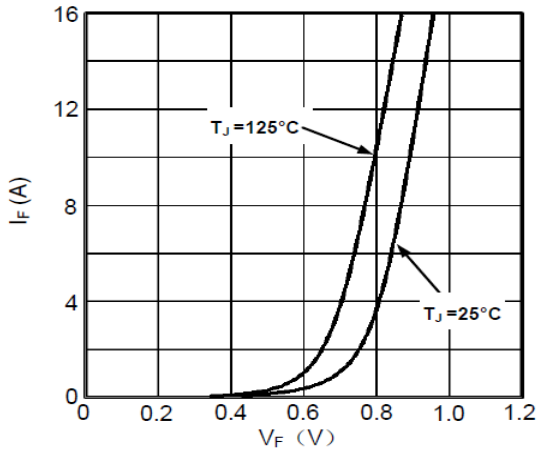


Fig1. Forward Voltage Drop vs Forward Current

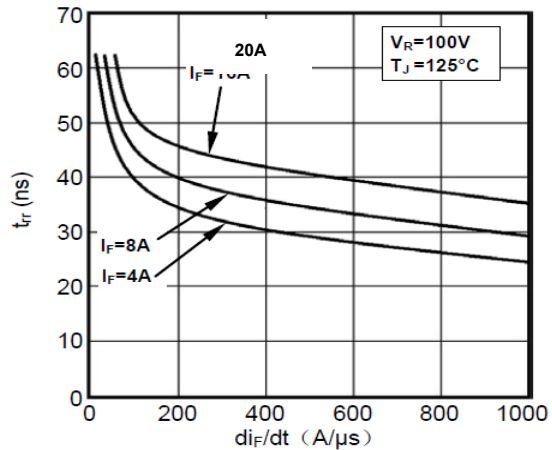


Fig2. Reverse Recovery Time vs  $di_F/dt$

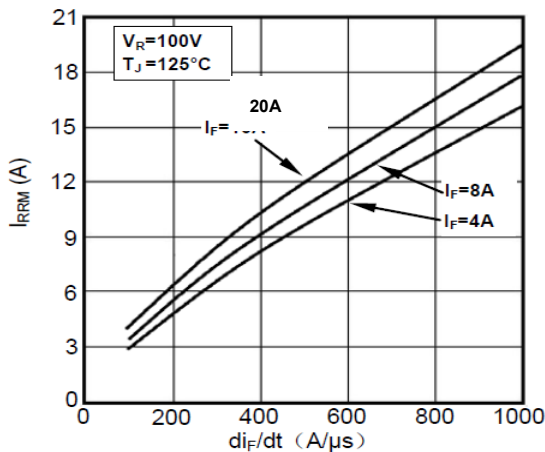


Fig3. Reverse Recovery Current vs  $di_F/dt$

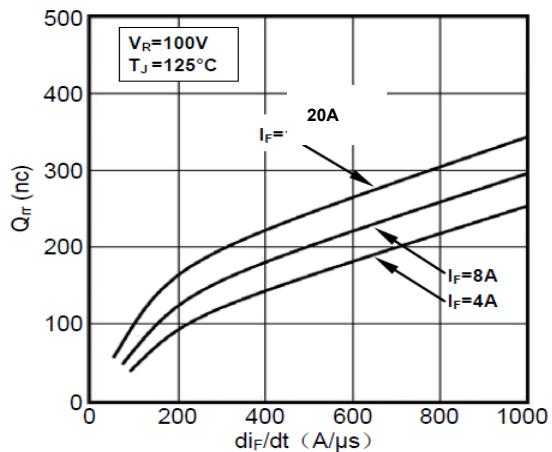


Fig4. Reverse Recovery Charge vs  $di_F/dt$

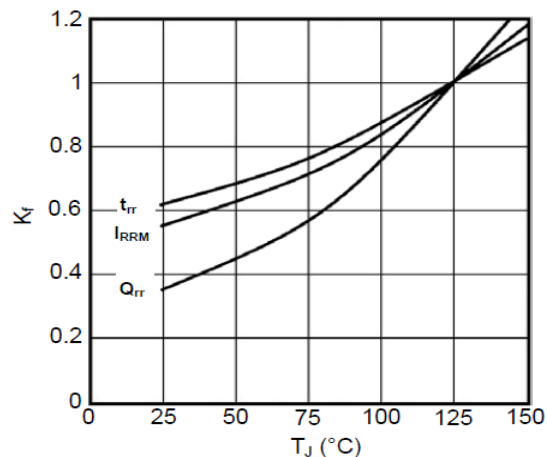


Fig5. Dynamic Parameters vs Junction Temperature

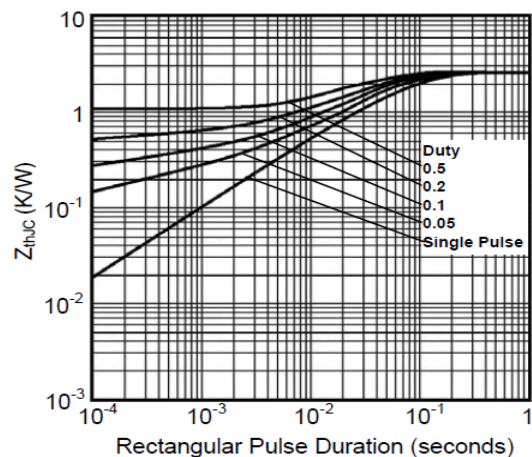


Fig6. Transient Thermal Impedance

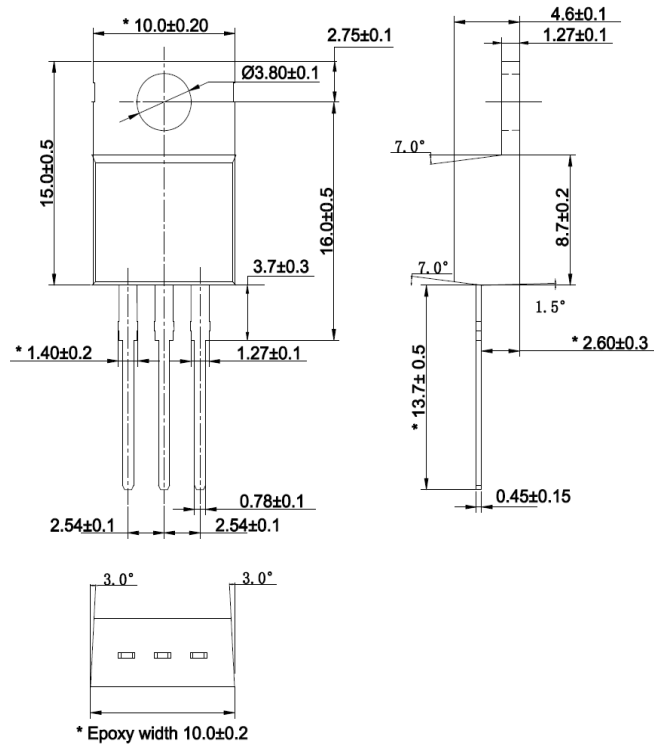
# MUR2020CT/ MUR2020FCT

Super Fast Recovery Planar Rectifier  
 Reverse Voltage 200V Forward Current 20A

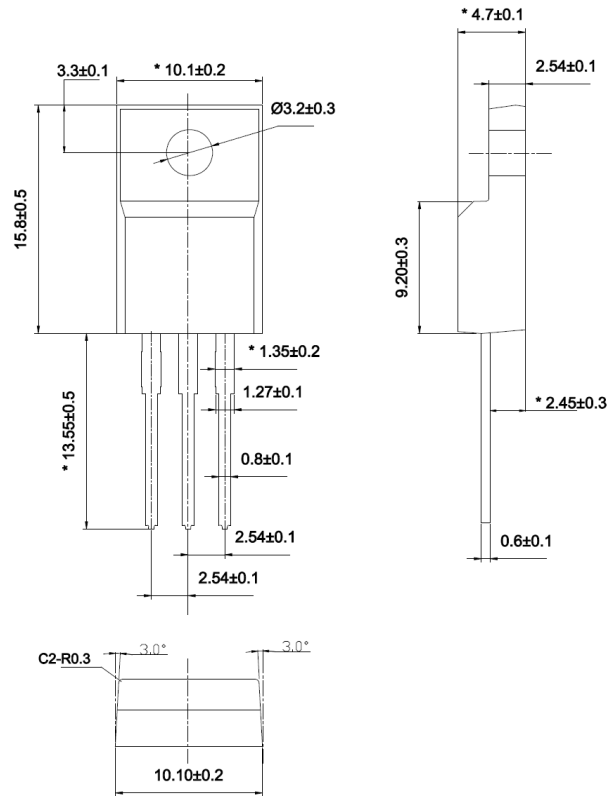
## Package Outline Dimensions

Unit: millimeters

**TO-220-AB**



**ITO-220--AB**



## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View MUR2020CT](#) on WIN SOURCE
- ⊖ [GOOD-ARK Electronics](#) Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management