

MUR3020CT THRU MUR3060CT

SUPER FAST RECTIFIERS

Reverse Voltage - 200 to 600 Volts Forward Current - 30.0 Amperes

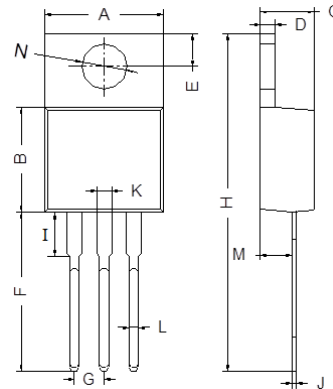
FEATURES

- 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

MECHANICAL DATA

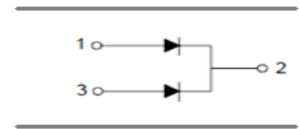
- Case: TO-220AB
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

TO-220AB



TO-220AB		
Dim	Min	Max
A	9.80	10.30
B	8.30	8.90
C	4.37	4.77
D	1.10	1.45
E	2.62	2.87
F	13.46	14.22
G	2.41	2.67
H	28.40	29.16
I	3.55	4.05
J	0.35	0.58
K	1.20	1.32
L	0.68	0.94
M	2.40	2.60
N	3.71	3.91

All Dimensions in mm



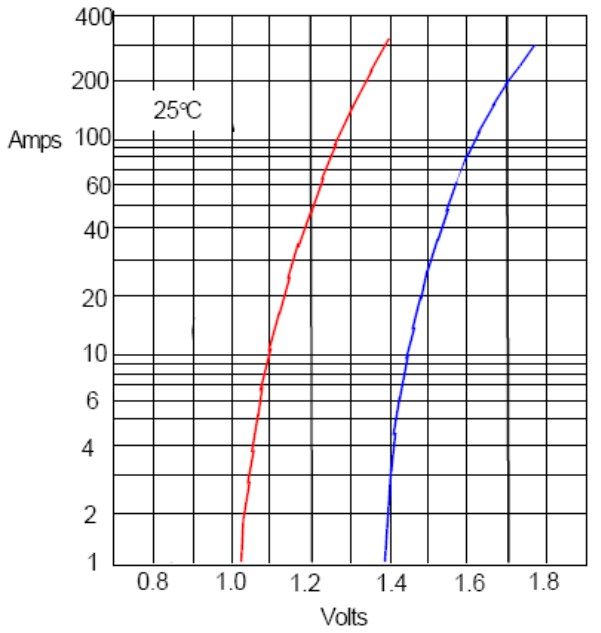
MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR3020 CT	MUR3030 CT	MUR3040 CT	MUR3060 CT	Unit
V_{RRM}	Reverse Peak Voltage	200	300	400	600	V
V_{RMS}	RMS Voltage	140	210	280	420	V
V_{DC}	DC Blocking Voltage	200	300	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$	30.0				A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superimposed on Rsted Load	300				A
I_R	Reverse Current $V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=150^\circ\text{C}$	5.0 250	10 500			μA
V_F	Forward Voltage $I_F=15\text{A}$	1.0	1.30	1.70		V
t_{rr}	Reverse Recovery Time $I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	35				ns
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	2.5				$^\circ\text{C/W}$
T_j, T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150				$^\circ\text{C}$

Note1: Pulse test: pulse width=300 μs , duty cycl $\leq 2.0\%$

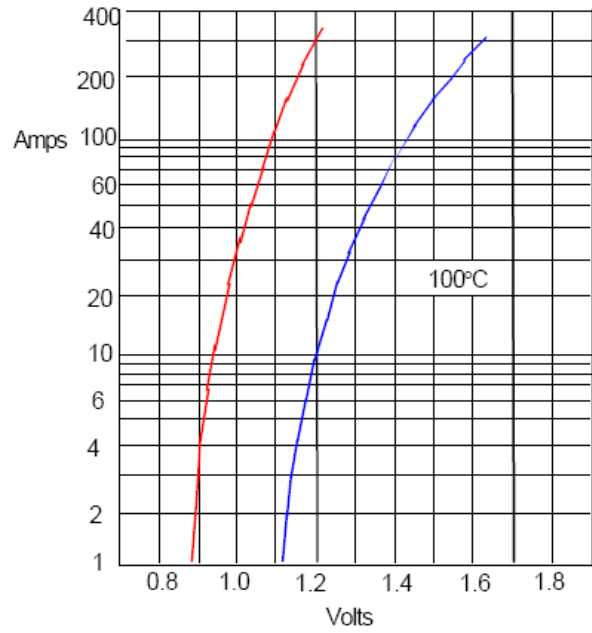
TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Figure 1
Typical Forward Characteristics @ $T_j = 25^\circ\text{C}$



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

Figure 2
Typical Forward Characteristics @ $T_j = 100^\circ\text{C}$



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