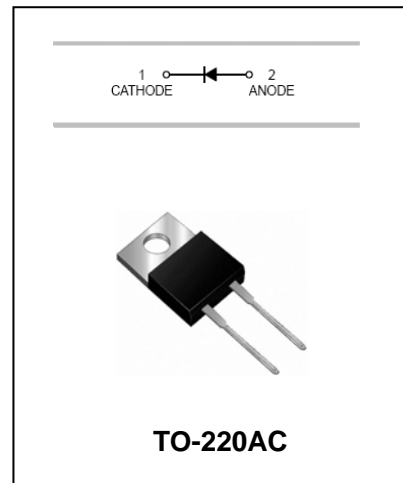


## Super Fast Rectifiers

## MUR2020---MUR2060

### 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.



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

Symbol	Parameter	MUR 2020	MUR 2040	MUR 2060	Unit
$V_{RRM}$	Recurrent Peak Reverse Voltage	200	400	600	V
$V_{RMS}$	RMS Voltage	140	280	420	V
$V_{DC}$	DC Blocking Voltage	200	400	600	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 superimposed on Rsted Load	125			A
$T_j T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +150			$^{\circ}C$

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

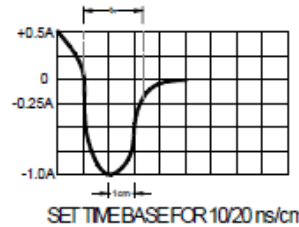
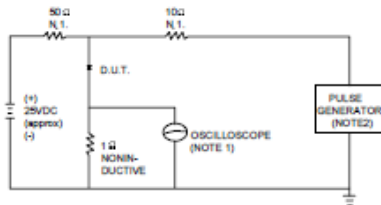
Parameter	Symbol	Test conditions	MUR2020	MUR2040	MUR2060	UNIT
			MAX			
Reverse Current	$I_R$	$V_R=V_{RRM}, T_A=25^{\circ}C$ $V_R=V_{RRM}, T_A=150^{\circ}C$	5.0 250	10 500		$\mu A$
Forward Voltage	$V_F$	$I_F=20A$	0.975	1.3	1.5	V
Reverse Recovery Time	$t_{rr}$	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$	25	50		ns

**Super Fast Rectifiers**

**MUR2020---MUR2060**

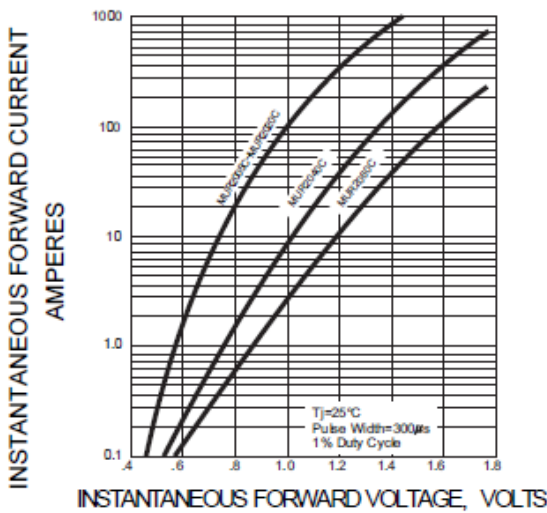
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

**FIG.1 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**

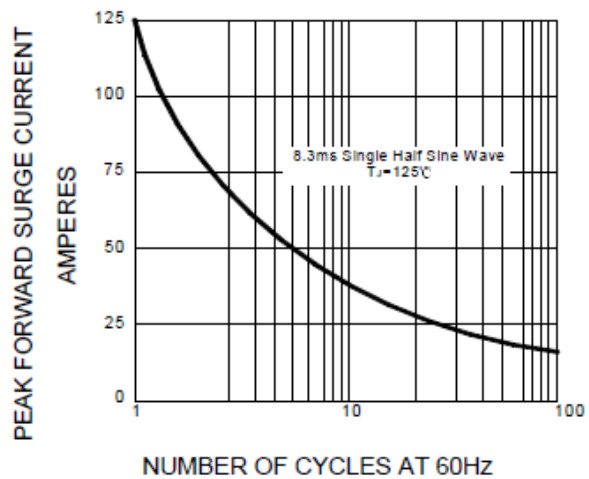


NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1MΩ, 22pF.  
2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω.

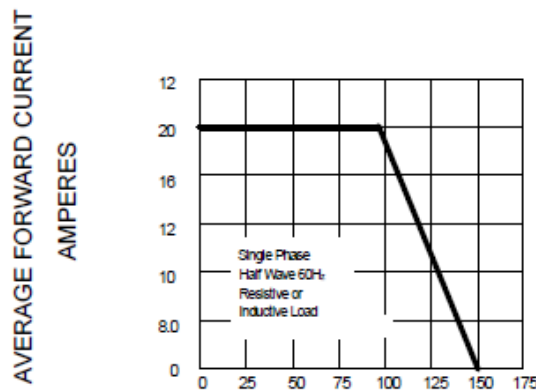
**FIG.2 - TYPICAL FORWARD CHARACTERISTIC**



**FIG.3 - PEAK FORWARD SURGE CURRENT**



**FIG.4 FORWARD DERATING CURVE**





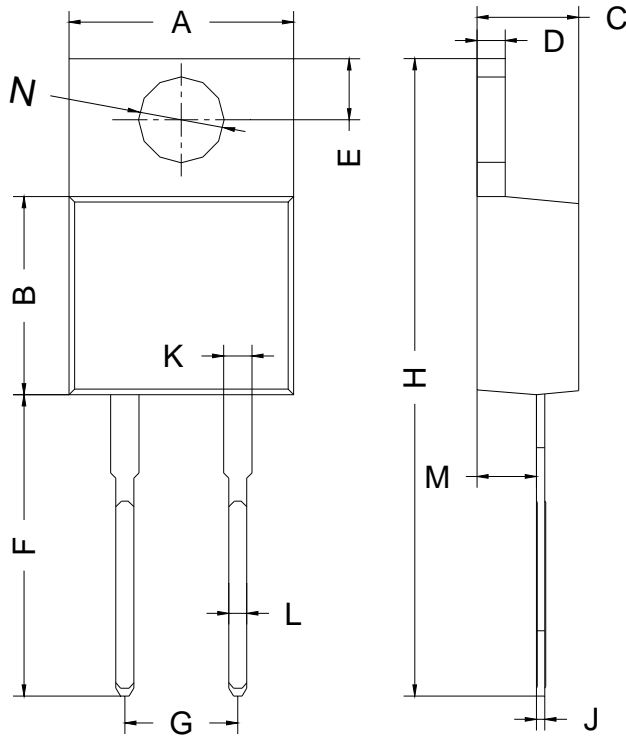
**Super Fast Rectifiers**

**MUR2020---MUR2060**

**PACKAGE OUTLINE**

Plastic surface mounted package

TO-220AC



TO-220AC		
Dim	Min	Max
A	9.80	10.30
B	8.70	9.10
C	4.57 Typical	
D	1.27 Typical	
E	2.64	2.84
F	13.14	13.74
G	4.98	5.18
H	28.03	28.83
J	0.38 Typical	
K	1.22	1.32
L	0.71	0.91
M	2.50 Typical	
N	3.86 Typical	
All Dimensions in mm		