



MUR1505 THRU MUR1560

SUPER FAST RECTIFIERS

Reverse Voltage - 50 to 600 Volts Forward Current - 15.0 Amperes

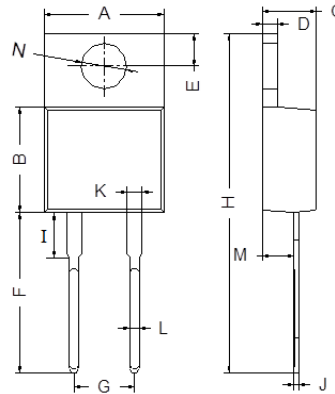
FEATURES

- 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

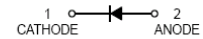
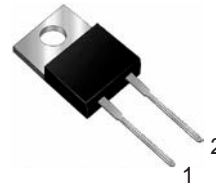
MECHANICAL DATA

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

TO-220AC



TO-220AC		
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	13.14	13.74
G	4.98	5.18
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

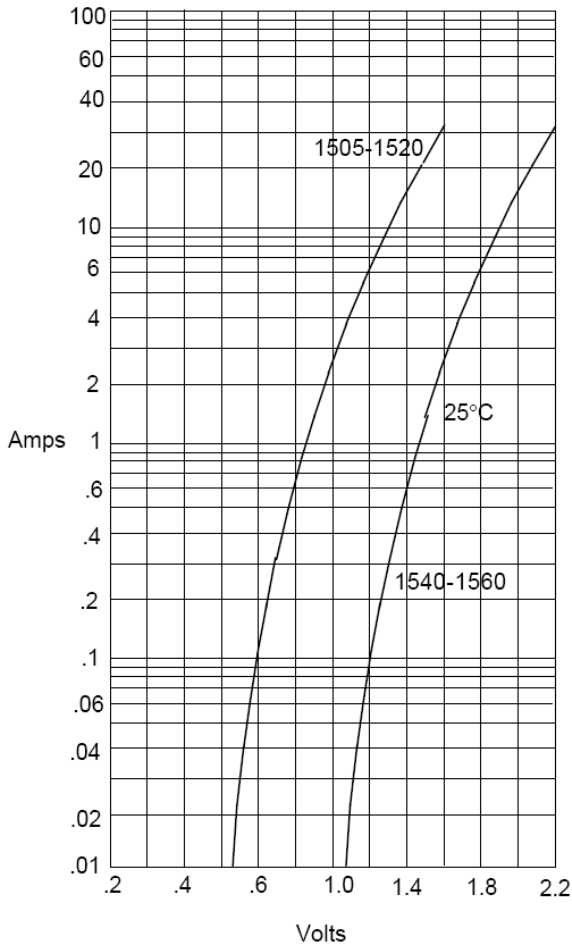
Symbol	Parameter	MUR1505	MUR1510	MUR1520	MUR1540	MUR1560	Unit
V_{RRM}	Rcurrent Peak Reverse Voltage	50	100	200	400	600	V
V_{RMS}	RMS Voltage	35	70	140	280	420	V
V_{DC}	DC Blocking Voltage	50	100	200	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ C$	15.0					A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superimp osed on Rsted Load	150					A
I_R	Reverse Current $V_R=V_{RRM}, T_A=25^\circ C$ $V_R=V_{RRM}, T_A=150^\circ C$	10 1000					μA
V_F	Forward Voltage $I_F=15A$	0.98		1.30	1.50	V	
t_{rr}	Reverse Recovery Time $I_F=0.5A, I_R=1A, I_{rr}=0.25A$	25		50		ns	
C_J	Measured at 1.0MHz, $V_R=4.0V$	160					pF
$T_j T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +150					$^\circ C$



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

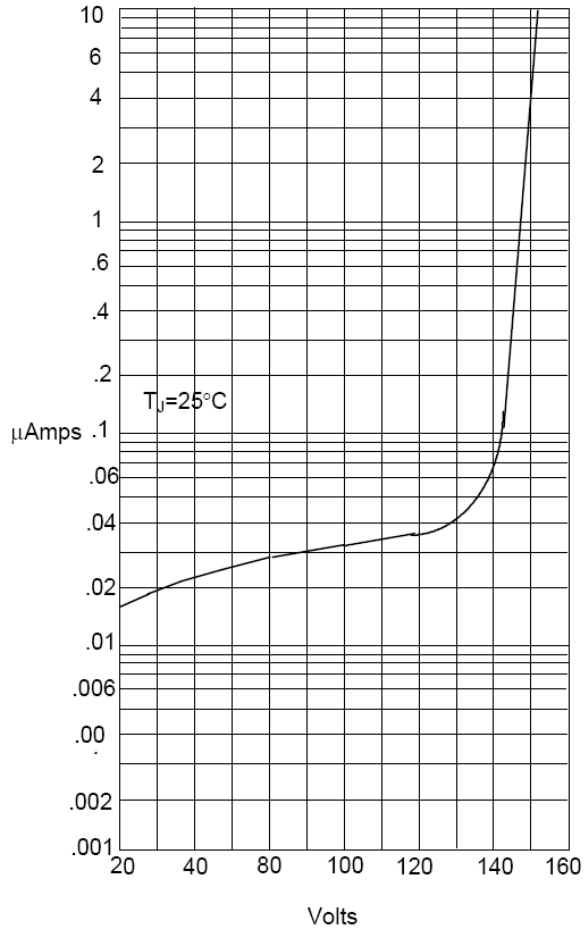
MUR1505 thru MUR1560

Figure 1
Typical Forward Characteristics



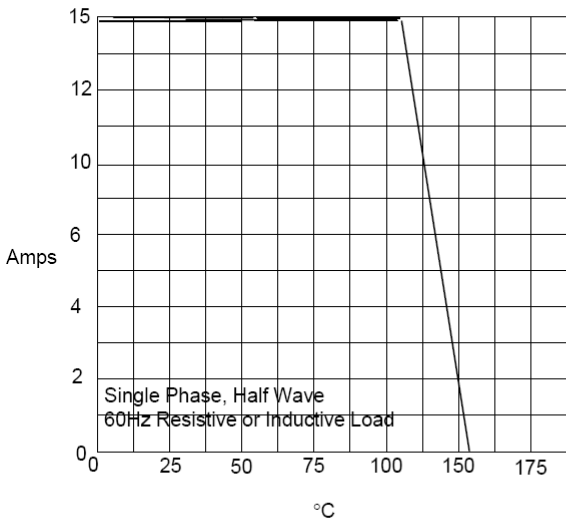
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



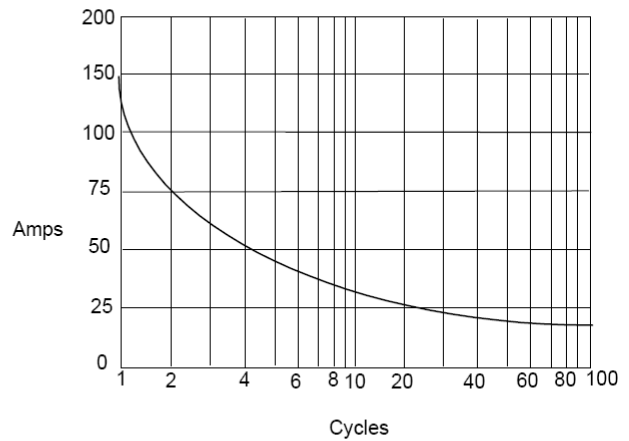
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

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