

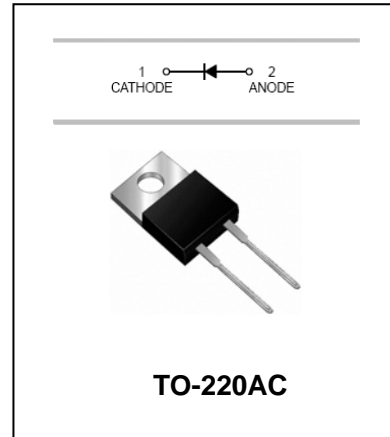


Super Fast Rectifiers

MUR1505---MUR1560

FEATURES

- Glass passivated chip
- Superfast switching time for high efficiency
- Low reverse leakage current
- High surge capacity



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR 1505	MUR 1510	MUR 1520	MUR 1540	MUR 1560	Unit
V_{RRM}	Recurrent 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					A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superimosed on Rsted Load	150					A
C_J	Measured at 1.0MHz, $V_R=4.0V$	160					pF
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +175					$^{\circ}C$

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

Parameter	Symbol	Test conditions	MUR1505-1520	MUR1540-1560	UNIT
			MAX		
Reverse Current	I_R	$V_R=V_{RRM}, T_J=25^{\circ}C$ $V_R=V_{RRM}, T_J=100^{\circ}C$	10		μA
			1000		
Forward Voltage	V_F	$I_F=15A, T_J=25^{\circ}C$	1.25	2.0	V
Reverse Recovery Time	t_{rr}	$I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$	35	60	ns



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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

MUR1505 thru MUR1560

Figure 1
Typical Forward Characteristics

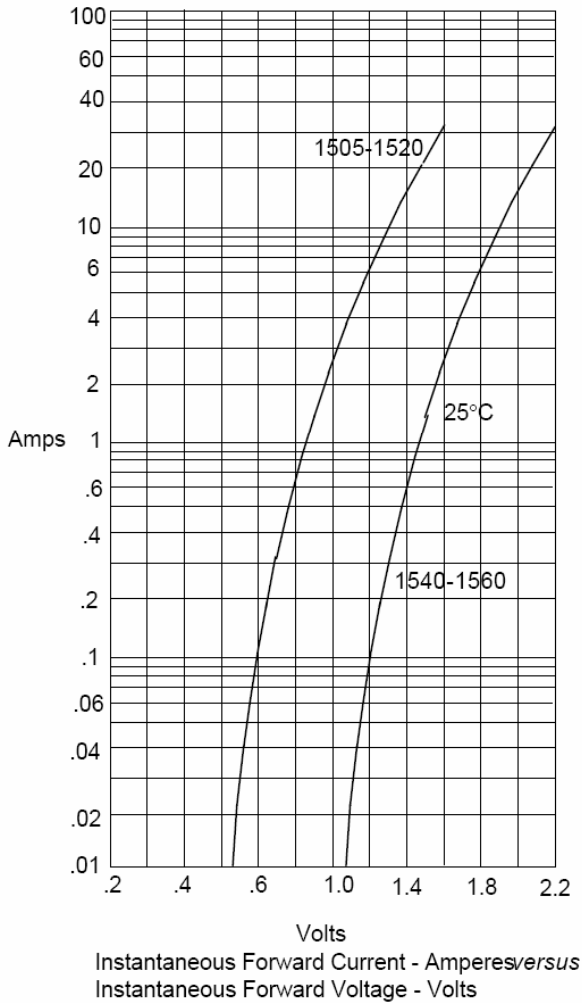
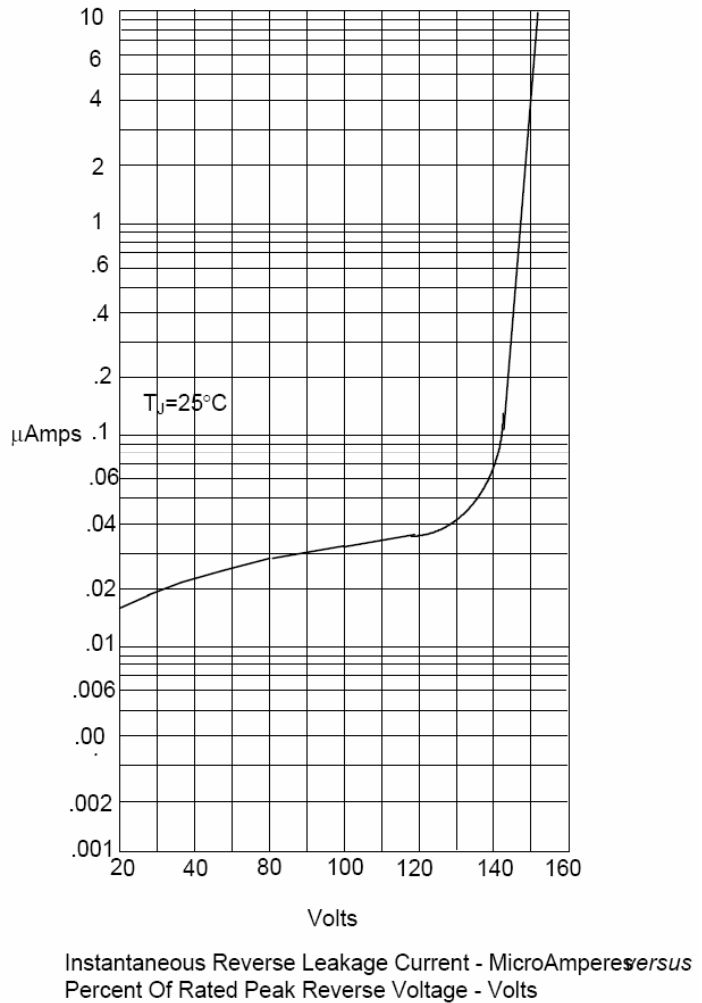


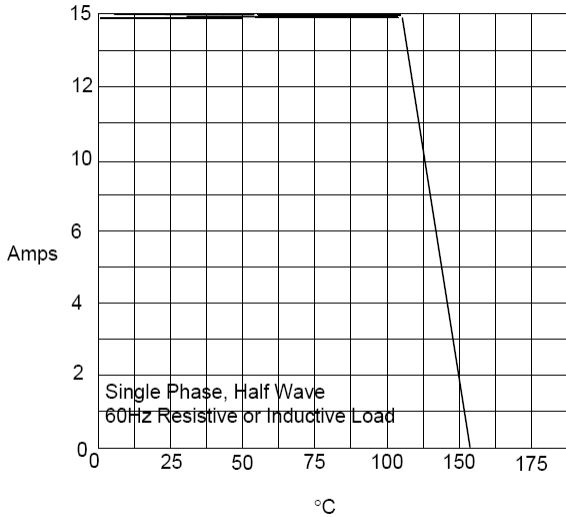
Figure 2
Typical Reverse Characteristics



Super Fast Rectifiers

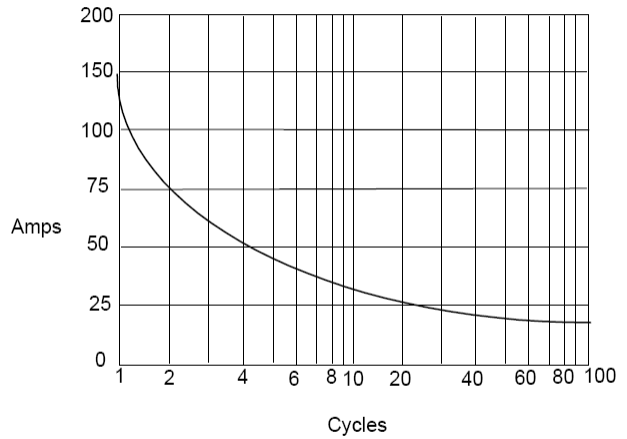
MUR1505---MUR1560

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

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		