

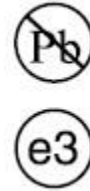


SUPER FAST GLASS PASSIVATED RECTIFIER MUR1505 ~ MUR1560

Super Fast Glass Passivated Rectifier

Features

- Glass passivated chip
- Super fast switching time for high efficiency
- Low reverse leakage current
- High surge capacity
- RoHS and REACH Compliance



Mechanical Data

Case:	
Polarity:	
Epoxy:	
Lead:	
Mounting Position:	
Weight:	

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	MUR1505	MUR1510	MUR1520	MUR1540	MUR1560	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	V	
VRMS	Max RMS Voltage	35	70	140	280	420	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	V	
I(AV)	Max Average Forward Rectified Current	15.0					A	$T_c=120^{\circ}C$
IFSM	Peak Forward Surge Current	150					A	8.3ms, half sine
TJ,TSTG	Operating and Storage Temperature Range	-55 to +175, -55 to +175					$^{\circ}C$	

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	MUR1505	MUR1510	MUR1520	MUR1540	MUR1560	Unit	Conditions
VF	Maximum Forward Voltage Drop Per Element 1505-1520/1540-1560	1.25		2.0			V	IFM =15A $T_J=25^{\circ}C$
IR	Max DC Reverse Current at Rated DC Blocking Voltage	10					μA	$T_J=25^{\circ}C$
		1000						$T_J=100^{\circ}C$
TRR	Maximum reverse recovery time	35		60			nS	Note 1
CJ	Typical Junction capacitance	160					pF	Measured at 1.0MHz, VR= 4.0V

Note:

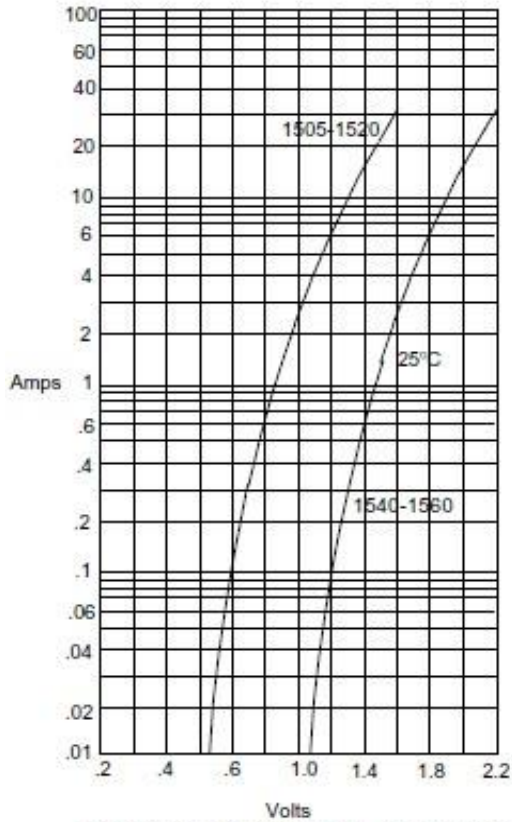
1. Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

* Pulse Test: Pulse Width 300 μ sec, Duty Cycle 2%

MUR1505 ~ MUR1560

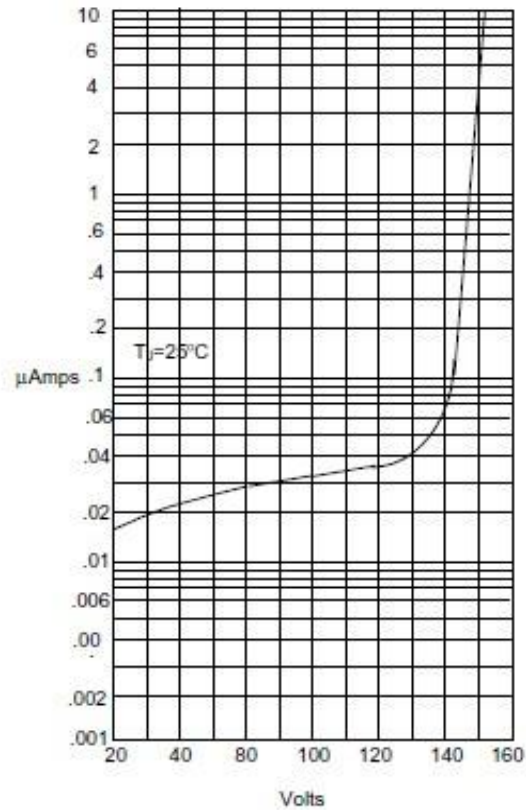
RATINGS AND CHARACTERISTIC CURVES MUR1505 THRU MUR1560

Figure 1
Typical Forward Characteristics



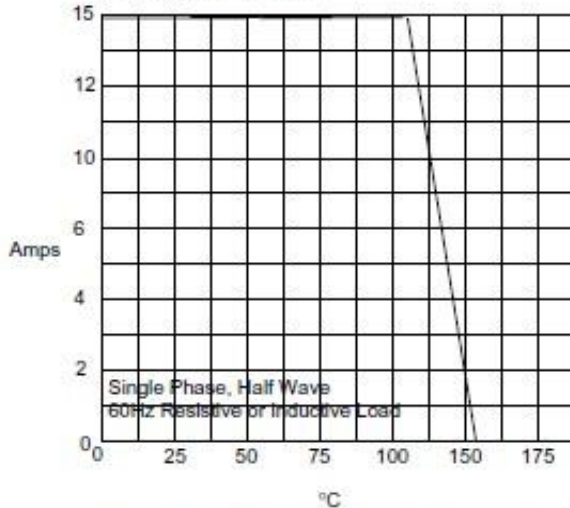
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



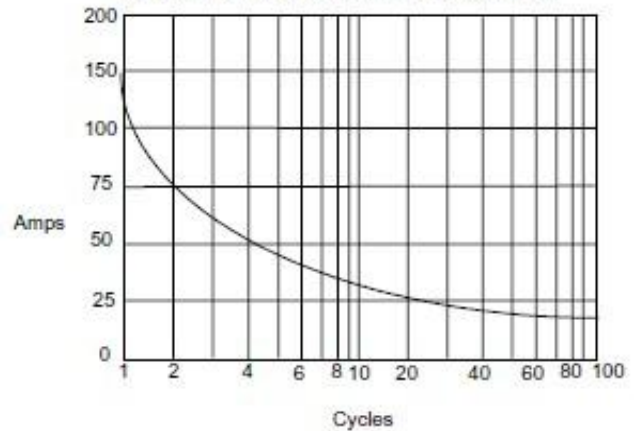
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Case Temperature - $^\circ\text{C}$

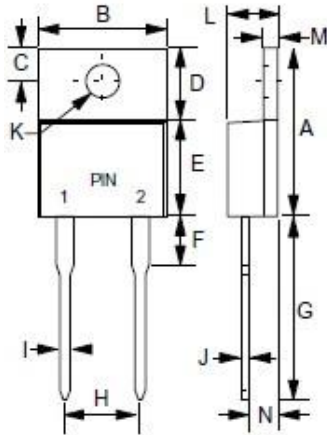
Figure 4
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

MUR1505 ~ MUR1560

Dimensions in inches (mm)

TO-220AC


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	----	.250	----	6.35	
G	.500	.580	12.70	14.73	
H	.190	.210	4.83	5.33	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

Contact us:
US HEADQUARTERS
MEI SEMI INC.
2902 Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828