



### Features

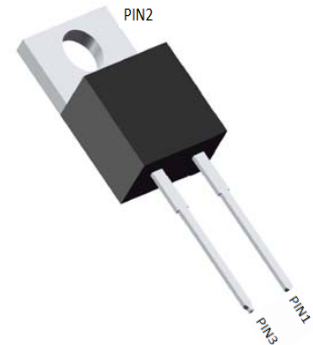
- Glass passivated chip
- Super fast switching time for high efficiency
- Low reverse leakage current
- High surge capacity

### Typical Applications

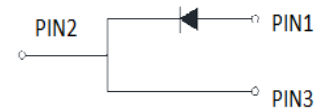
Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

### Mechanical Data

- **Package:** TO-220AC  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked



TO-220AC



### Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR1510	MUR1515	MUR1520	MUR1540	MUR1560
Device marking code			MUR1510	MUR1515	MUR1520	MUR1540	MUR1560
Repetitive Peak Reverse Voltage	VRRM	V	100	150	200	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	Io	A	15				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave,1 cycle, Ta=25°C	IFSM	A	200			150	
Storage Temperature	Tstg	°C	-55 ~ +150				
Junction Temperature	Tj	°C	-55 ~ +150				

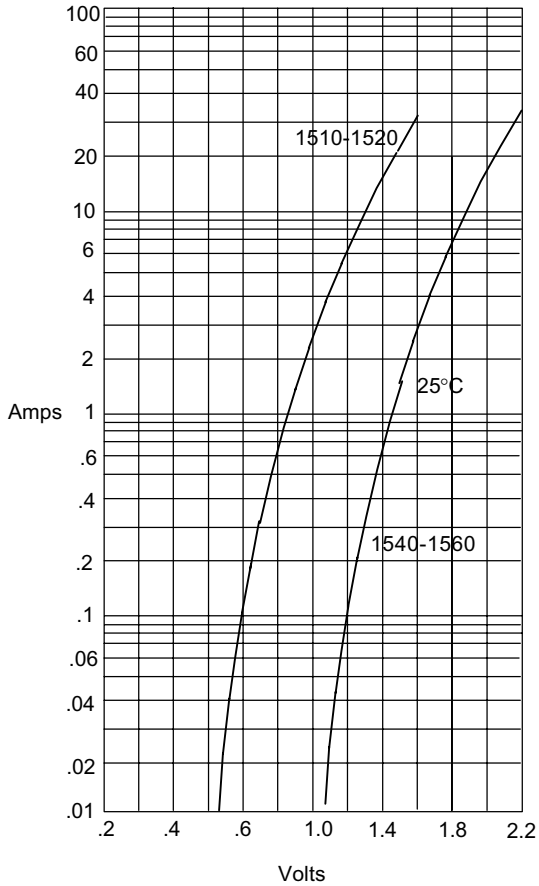
### Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	1510	1515	1520	1540	1560
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=15A	1.05			1.25	1.50
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM1</sub>	uA	VRM=VRRM Ta=25°C	10				
	I <sub>RRM2</sub>		VRM=VRRM Ta=125°C	500			1000	
Reverse Recovery Time	T <sub>rr</sub>	ns	IF=0.5A I <sub>RM</sub> =1A I <sub>RR</sub> =0.25A	35			60	



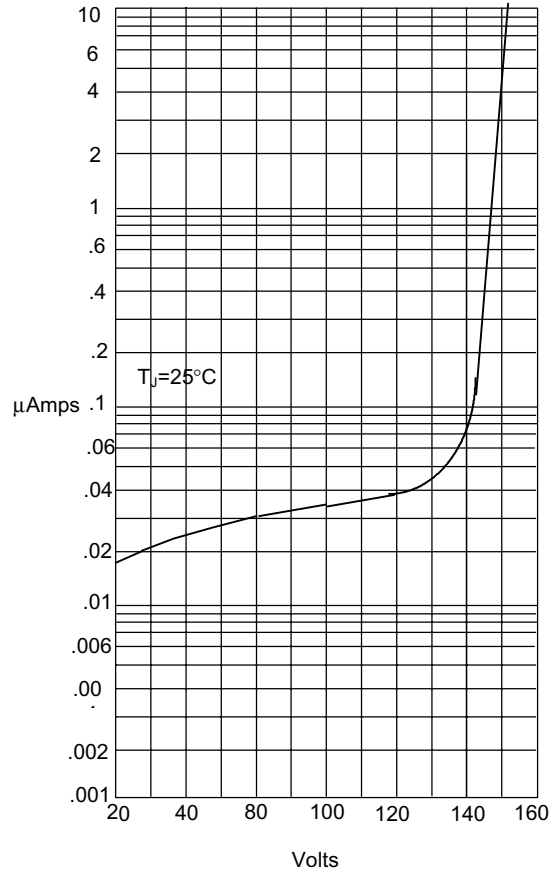
### Characteristics (Typical)

Figure 1  
Typical Forward Characteristics



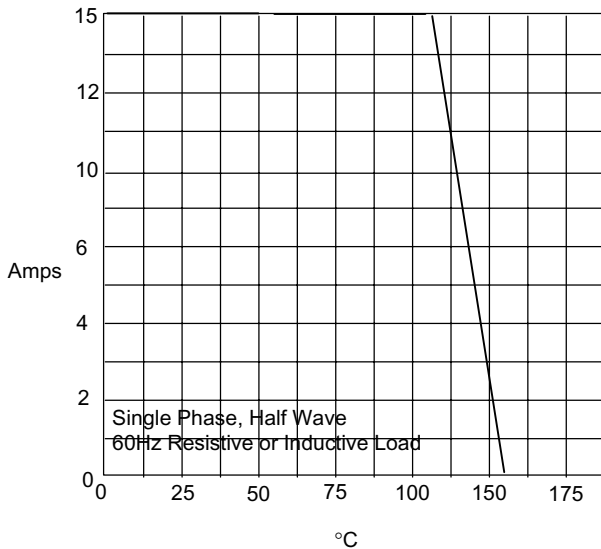
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



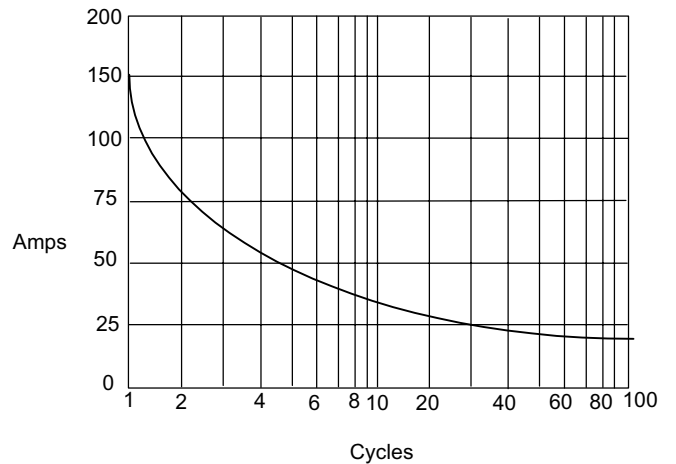
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Case Temperature - °C

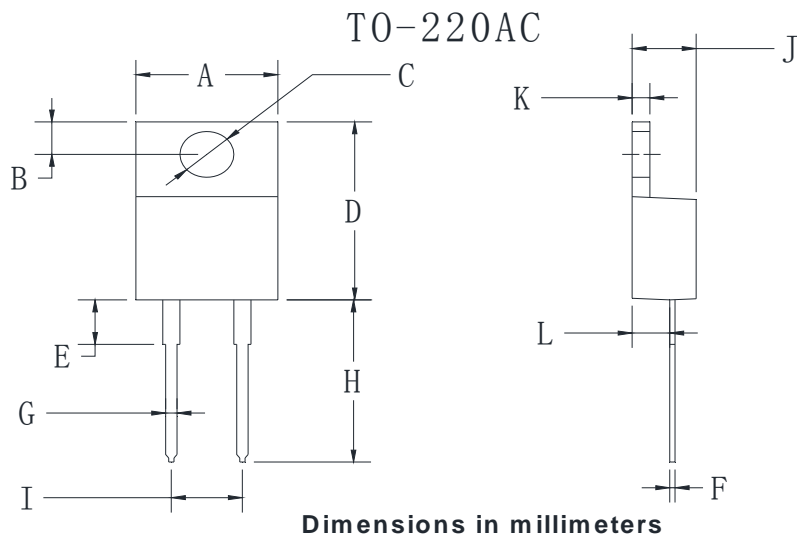
Figure 4  
Maximum Non-Repetitive Forward Surge Current



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



### Outline Dimensions



TO-220AC		
Dim	Min	Max
A	9.5	10.9
B	2.22	3.27
C	3.34	4.31
D	14.5	15.5
E	3.16	4.46
F	0.28	0.64
G	0.68	0.94
H	13.06	14.62
I	4.55	5.60
J	4.04	5.1
K	1.14	1.4
L	2.14	3.19



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