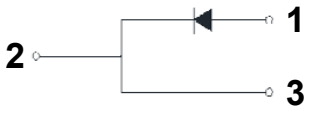
MUR1560G

Ultra-Fast Recovery Rectifier Diodes

Features

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

TO-220C-2L



Typical Applications

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

Mechanical Data

- **Package**: TO-220C-2L
  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

Maximum Ratings (Ta=25℃ Unless otherwise specified)

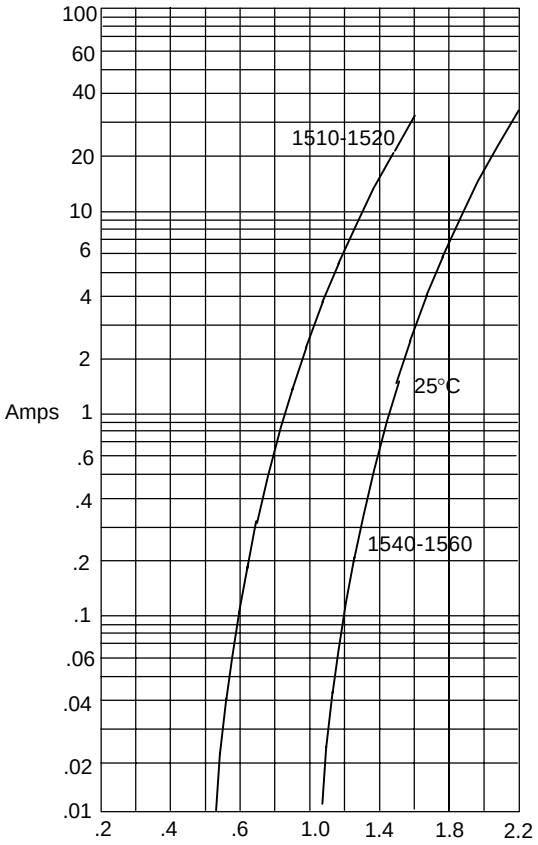
Parameter	Symbol	Unit	MUR1510G	MUR1515G	MUR1520G	MUR1540G	MUR1560G
Device marking code			MUR1510G	MUR1515G	MUR1520G	MUR1540G	MUR1560G
Repetitive Peak Reverse Voltage	V_{RRM}	V	100	150	200	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	Io	A	15				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave,1 cycle, Ta=25℃	I_{FSM}	A	200			150	
Storage Temperature	Tstg	℃	-55 ~ +150				
Junction Temperature	Tj	℃	-55 ~ +150				

Electrical Characteristics (Ta=25℃ Unless otherwise specified)

Parameter	Symbol	Unit	Test Conditions	1510	1515	1520	1540	1560
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=15A	1.05			1.25	1.50
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	uA	$V_{RM}=V_{RRM}$ T_a=25℃	10				
	I_{RRM2}		$V_{RM}=V_{RRM}$ T_a=125℃	500				1000
Reverse Recovery Time	Trr	ns	I_F=0.5A I_{RM}=1A I_{RR}=0.25A	35			60	

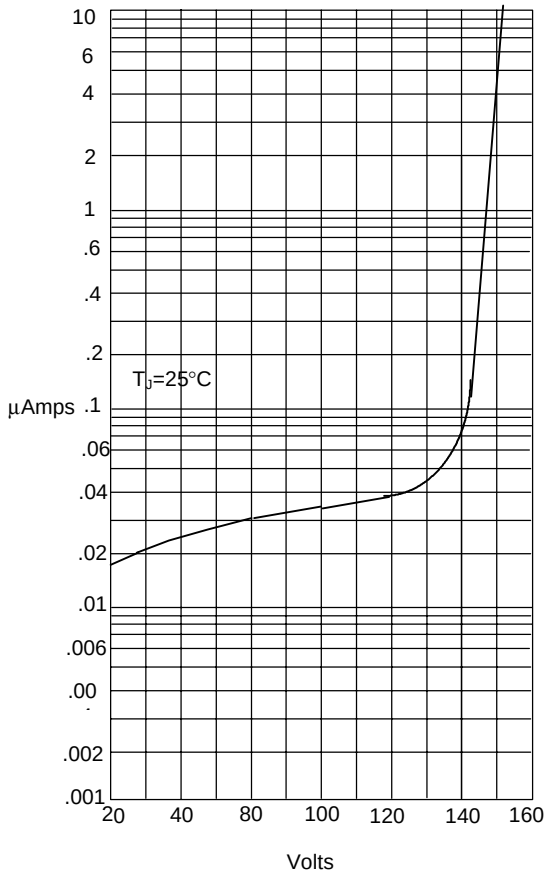
Characteristics (Typical)

Figure 1
Typical Forward Characteristics



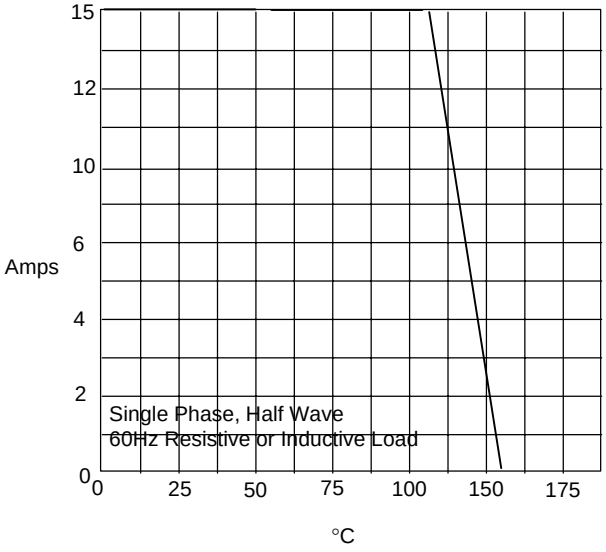
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



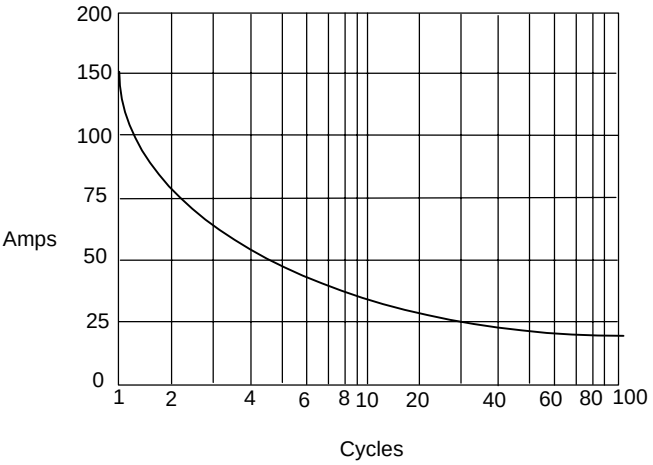
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



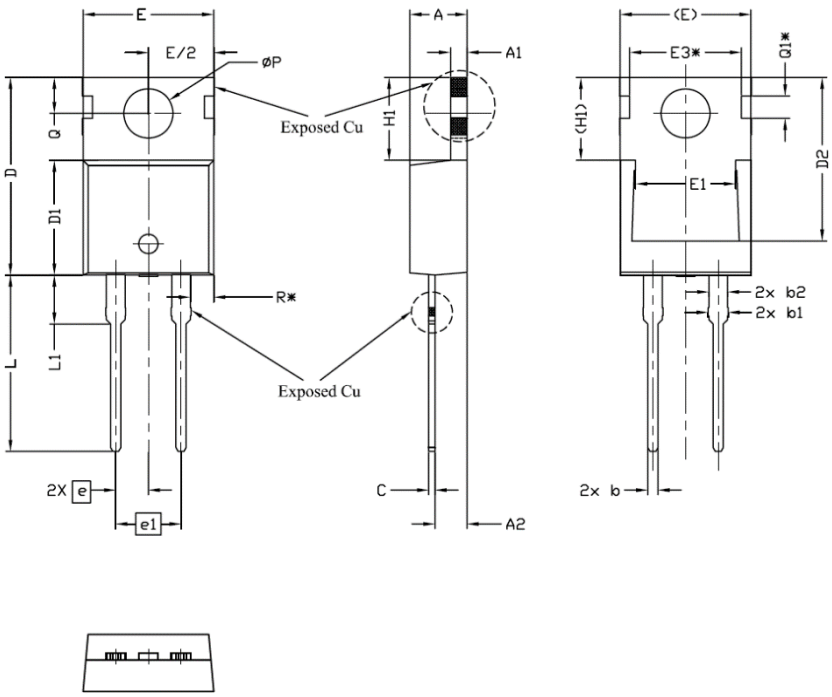
Average Forward Rectified Current - Amperes *versus*
Case Temperature -°C

Figure 4
Maximum Non-Repetitive Forward Surge Current



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

Package Information
TO-220C-2L



SYMBOL	DIMENSIONS			NOTES
	MIN.	NOM.	MAX.	
A	4.24	4.44	4.64	
A1	1.15	1.27	1.40	
A2	2.30	2.48	2.70	
b	0.70	0.80	0.90	
b1	1.20	1.55	1.75	
b2	1.20	1.45	1.70	
c	0.40	0.50	0.60	
D	14.70	15.37	16.00	4
D1	8.82	8.92	9.02	
D2	12.43	12.73	12.83	5
E	9.96	10.16	10.36	4,5
E1	6.86	7.77	8.89	5
E3*	8.70REF.			
e	2.54BSC			
e1	5.08BSC			
H1	6.30	6.45	6.60	5,6
L	13.47	13.72	13.97	
L1	3.60	3.80	4.00	
ØP	3.75	3.84	3.93	
Q	2.60	2.80	3.00	
Q1*	1.73REF.			
R*	1.82REF.			

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