



Features

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

Typical Applications

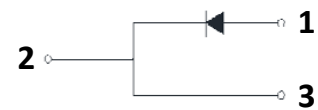
Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data

- **Package:** TO-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



TO-220C-2L



Maximum Ratings (T_a=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℃	IFSM	A	200			150	
Storage Temperature	Tstg	℃	-55 ~ +150				
Junction Temperature	Tj	℃	-55 ~ +150				

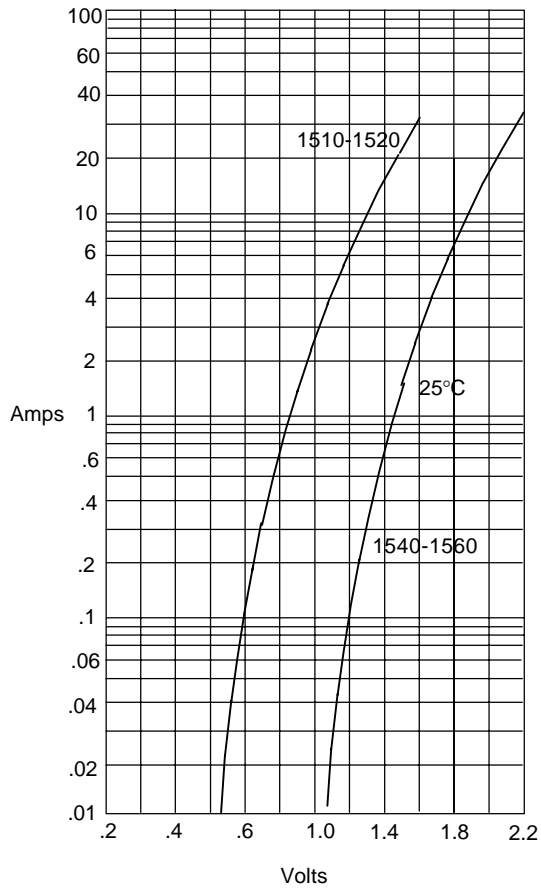
Electrical Characteristics (T_a=25°C Unless otherwise specified)

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°C	10				
	I _{RRM2}		V _{RM} =V _{RRM} T _a =125°C	500				1000
Reverse Recovery Time	T _{rr}	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A	35			60	



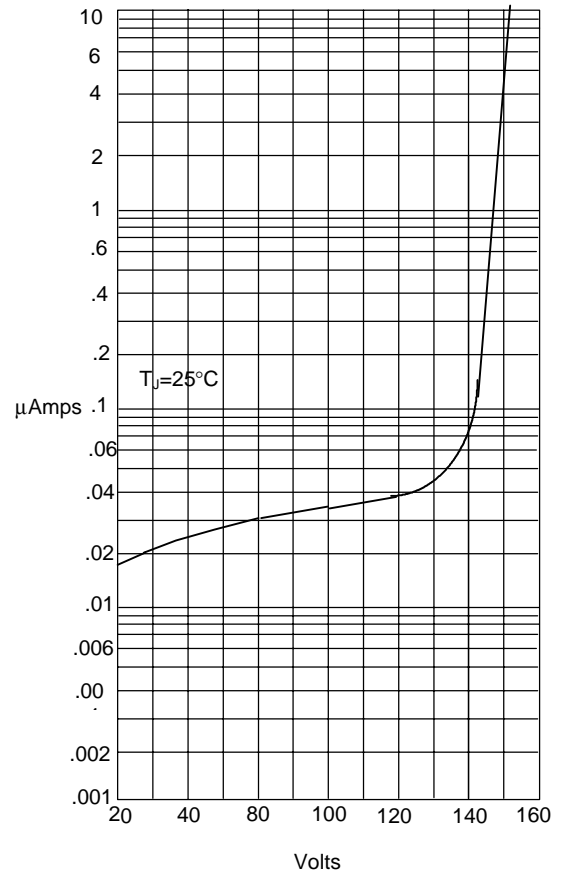
Characteristics (Typical)

Figure 1
Typical Forward Characteristics



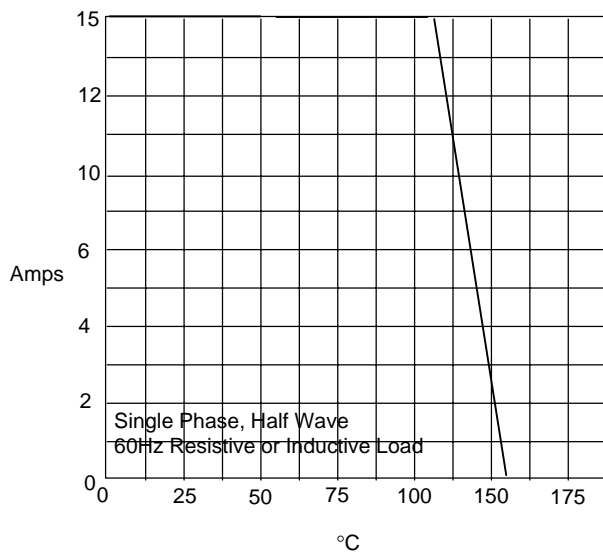
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



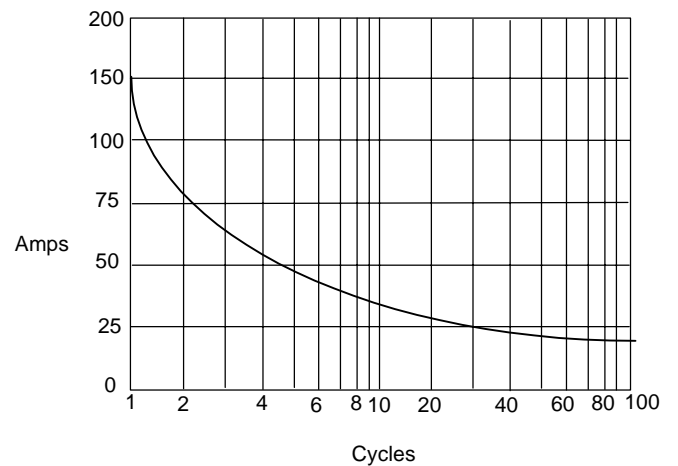
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve

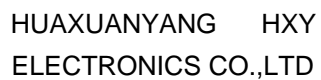


Average Forward Rectified Current - Amperes versus
Case Temperature - °C

Figure 4
Maximum Non-Repetitive Forward Surge Current



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

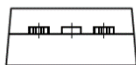


MUR1510-MUR1560

Ultra-Fast Recovery Rectifier Diodes

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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