



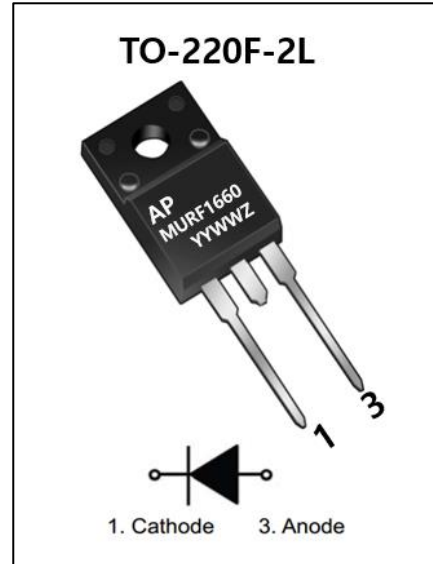
Super-fast Recovery Rectifier Diodes Reverse Voltage 200 to 600 Volts Forward Current 16A

Features

- Super-fast Rectifier diode
- High surge capability
- Low Forward Voltage Drop
- High surge current capability
- Super Fast Switching Speed For High Efficiency
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7s, per JESD 22-B106

Mechanical Data

- **Case** : Case: TO-220F-2L
- **Terminals** : Lead solderable per MIL-STD-202, Method 208
- **Lead free finish, RoHS compliant**
- **Case Material**: "Green" molding compound, UL flammability classification 94V-0, "Halogen-free".
- **Weight** : 1.75gram



Maximum Ratings Characteristics

TA = 25°C unless otherwise specified

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter		Symbol	MURF1620	MURF1640	MURF1660	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	200	400	600	V
Maximum RMS voltage		V _{RMS}	140	280	420	V
Maximum DC Blocking Voltage		V _{DC}	200	400	600	V
Maximum Average Forward Rectified Current	Per Leg	I _{F(AV)}	16			A
	Per Device	I _{F(AV)}	32			
Peak Forward Surge Current 8.3ms Single Half sine Wave Superimposed on Rated Load		I _{FSM}	200			A
Forward Voltage at 16A (Note 1)	T _a = 25°C	V _F	0.975	1.30	1.70	V
	T _a = 125°C		0.895	1.00	1.20	
Maximum Reverse Recovery Time ⁽¹⁾		trr	35			ns
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _a = 25°C	I _R	5	10		uA
	T _a = 125°C		250	500		
Maximum Thermal Resistance Junction to Case		R _{θJc}	3	2		°C/W
Operating Junction temperature Range		T _J	-55 ~ +150			°C
Storage Temperature Range		T _{STG}	-55 ~ +150			°C

Note

- (1) Pulse Test :Pulse Width = 300uS, Duty <2.0%



Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise specified)

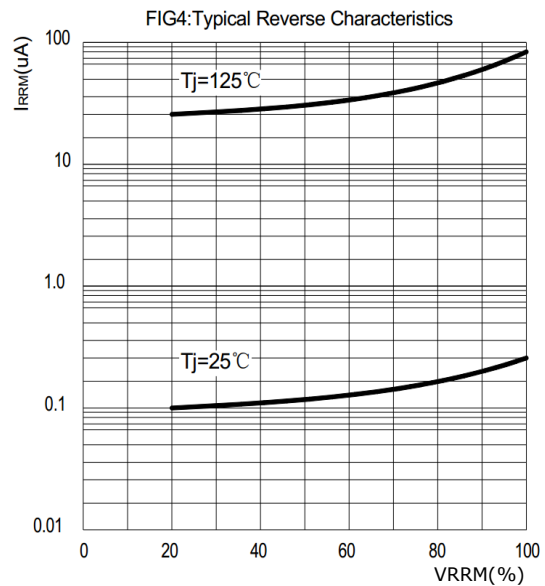
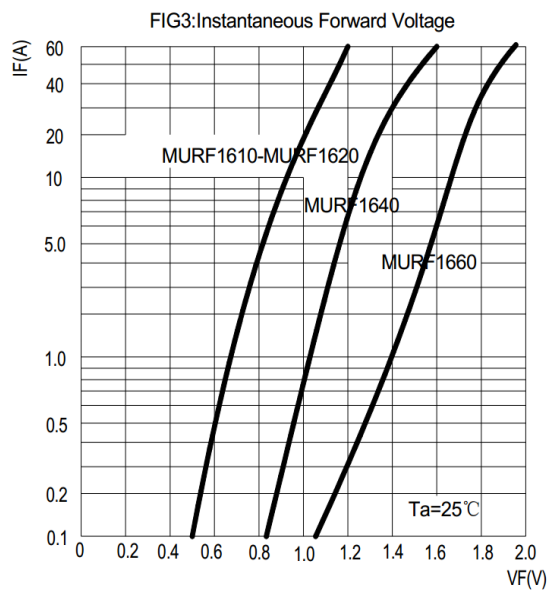
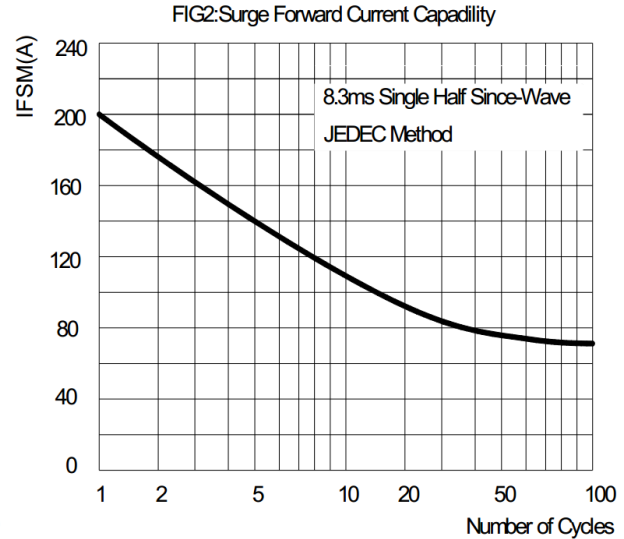
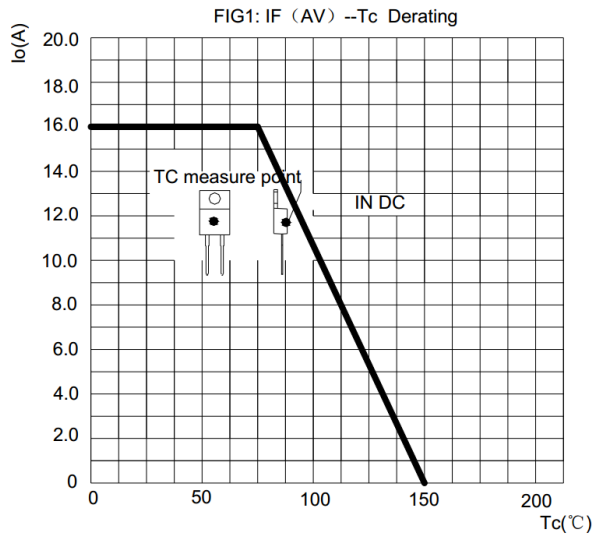
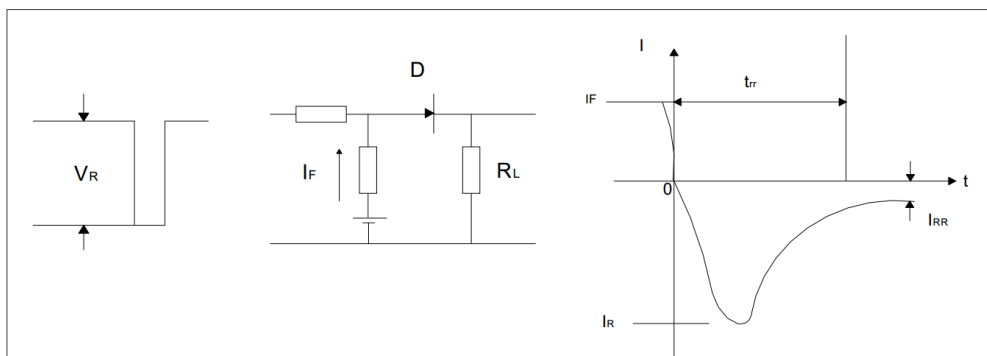


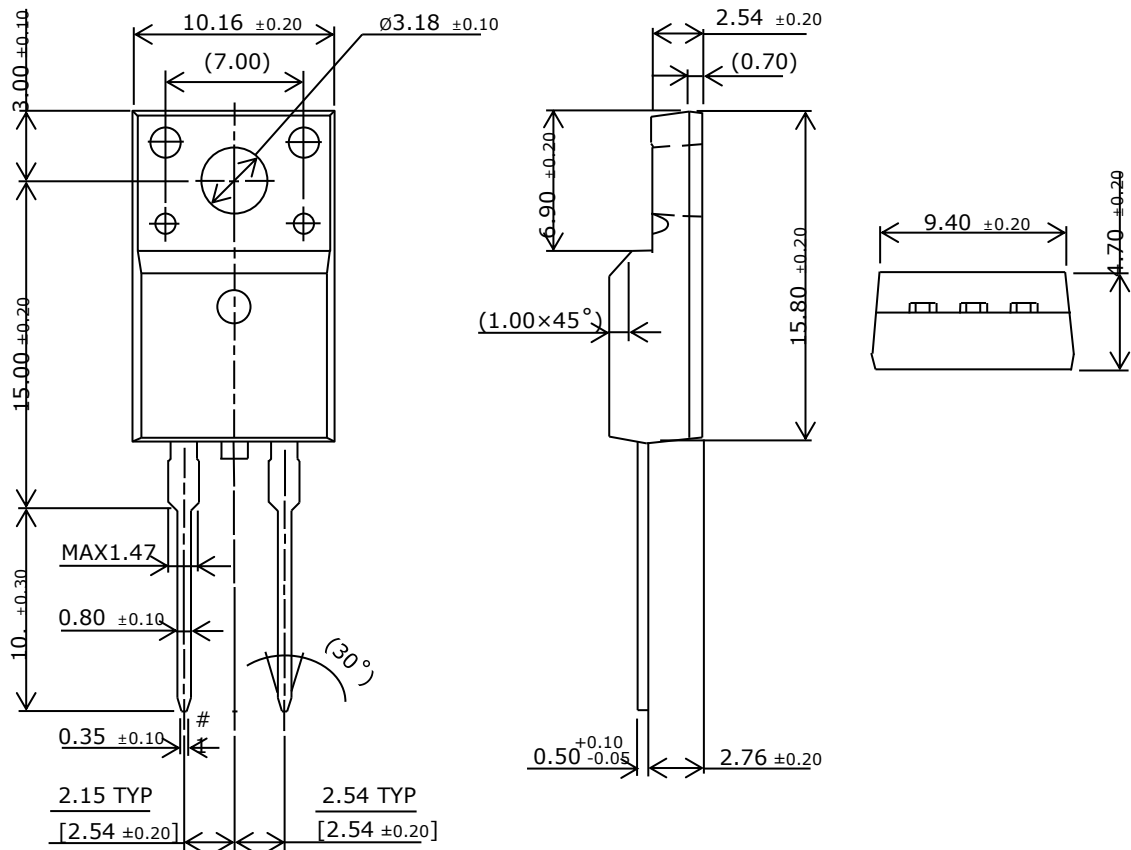
Diagram of circuit and Testing wave form of reverse recovery time





Package dimension : TO-220F-2L

Unit : mm



Ordering Information

Part No	Package	Packing	Finish	Halogen	Packing Unit
MURF1620	TO-220F-2L	Tube	Sn	Free	Tube : 50ea
MURF1640					Inner : 1000ea
MURF1660					MOQ : 5,000ea



Revision History

No	Date	Contents
0	2020-04-12	Initial Brief Datasheet Release

<http://www.apsemi.com>

IMPORTANT NOTICE

AP Semiconductor co, Ltd reserves the right to make changes without further notice to any products or specifications herein. AP Semiconductor co, Ltd does not assume any responsibility for use of any its products for any particular purpose, nor does AP Semiconductor co, Ltd assume any liability arising out of the application or use of any its products or circuits. AP Semiconductor co, Ltd does not convey any license under its patent rights or other rights nor the rights of others.

AP Semiconductor Co., Ltd

Contact. Tel 82.70.4693.2299 FAX 82.70.4000.4009

E-mail: sales@apsemi.com

© 2015 AP semiconductor Co., Ltd. –Printed in KOREA –All Rights Reserved.