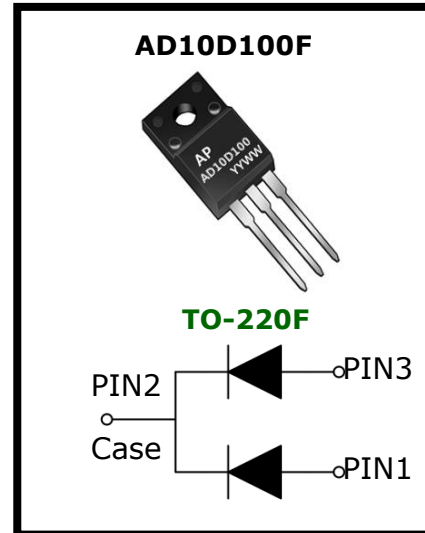


100V 10A Ultra Low VF Schottky

Characteristics Summary

Characteristics	Values	Units
IF(AV)	5 X 2	A
VRRM	100	V
VF @ 5A, TJ = 25°C	0.61	V, typ.
TJ, Operating Junction Temperature	-40 to +150	°C



Features

- Ultra Low Forward Voltage (VF) Drop
- Very Low Reverse Leakage in high temperature.
- Softest, fast switching capability
- 150°C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

Typical Applications

Device optimized for low forward voltage drop to maximize efficiency in Power Supply applications.



Maximum Ratings Characteristics

(TA = 25°C unless otherwise specified)

Parameter	Symbol	Values	Units
DC Blocking Voltage	V _{RM}	100	V
Working Peak Reverse Voltage	V _{RWM}		V
Peak Repetitive Reverse Voltage	V _{RRM}		V
Average Rectified Forward Current Per device (Rated VR-20Khz Square Wave) – 50% duty cycle	I _D	5	A
Peak Forward Surge Current – 1/2 60hz	I _{FSM}	170	A
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I _{RRM}	1	A
Typical Thermal Resistance (per leg) Package = TO-220F	R _{θJC}	4	°C / W
Isolation voltage (TO-220F only)	V _{AC}	1500	V
Maximum Rate of Voltage Change (at Rated VR)	dv/dt	10000	V/uS
Operating Junction Temperature	T _J	-40 to +150	°C
Storage Junction Temperature	T _{STG}	-40 to +150	

Electrical Characteristics – (per leg)

(TA = 25°C unless otherwise specified)

Parameter	Test Conditions		Symbol	Typ.	Max.	Units
Instantaneous Forward Voltage	IF = 3 A	T _J = 25°C	V _F *	0.53	0.60	V
	IF = 5 A			0.61	0.67	
	IF = 3 A	T _J = 125°C		0.48	-----	
	IF = 5 A			0.55	0.6	
Instantaneous Reverse Current	VR = 70V	T _J = 25°C	I _R *	2.0	-----	uA
	VR = 100V			10	40	
	VR = 70V	T _J = 125°C		3.1	-----	mA
	VR = 100V			4	20	
Junction Capacitance	V _R = 5V, f = 1MHz		C _J	238		pF

* Pulse width < 300 uS, Duty cycle < 2%

Characteristics Curves

(TA = 25°C unless otherwise specified)

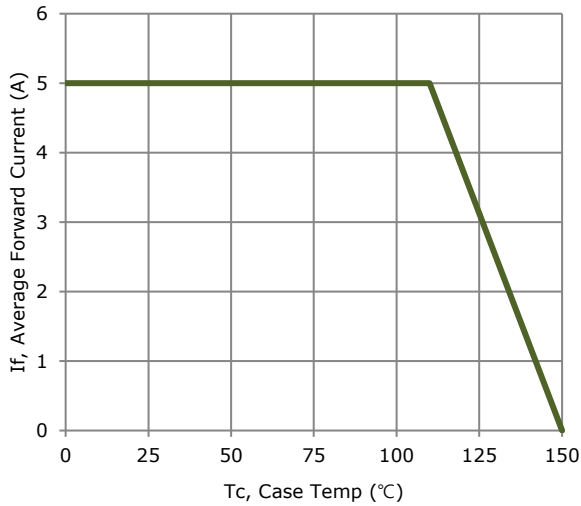


Figure 1 : Current Derating, Case

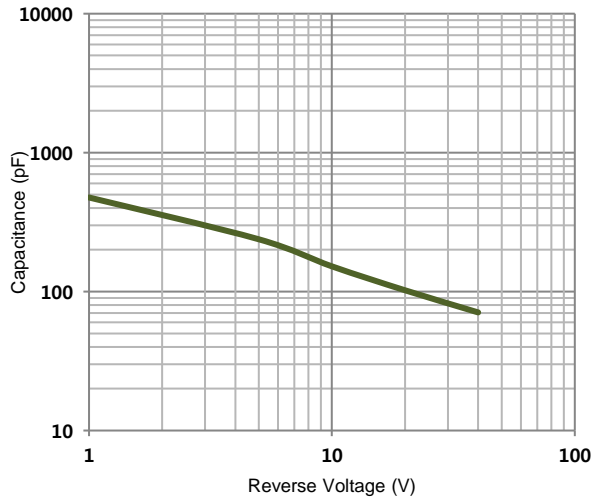


Figure 2 : Typical Junction Capacitance

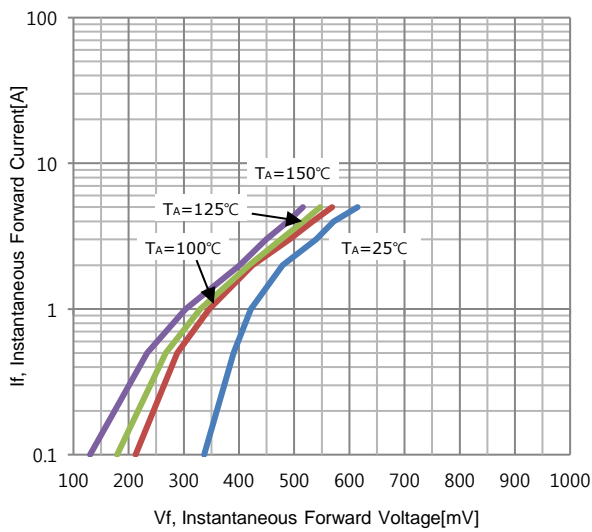


Figure 3 : Typical Forward Voltage

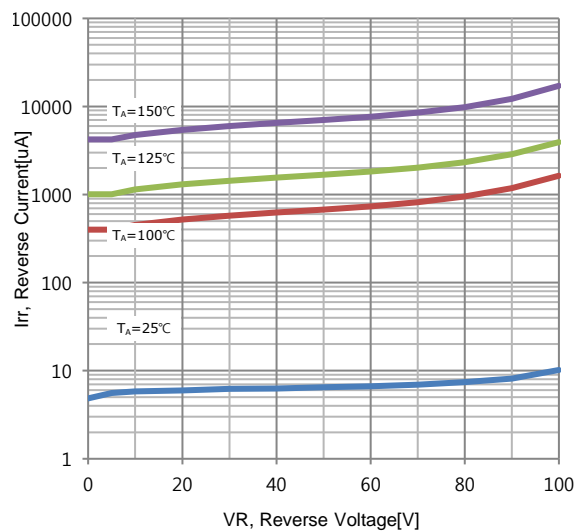


Figure 4 : Typical Reverse Current

Ordering Information

Part No	Package	Packing	Finish	Halogen	Packing Unit
AD10D100F	TO-220F	Tube	Sn	Free	5,000ea

Marking Layout



1ST Line : Company logo

2nd Line : Date code

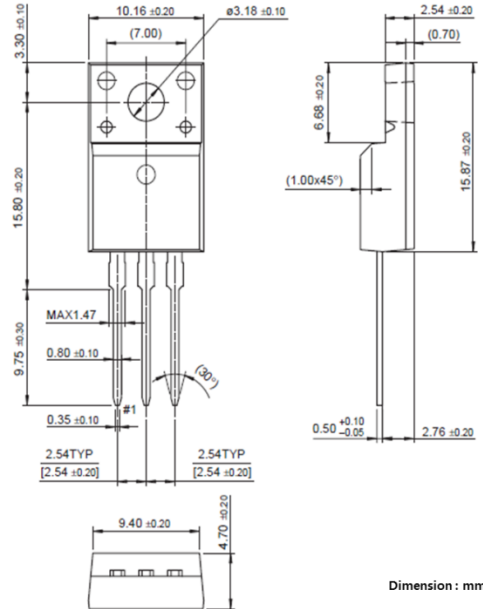
- **YY : Last two digit of calendar year**
- **WW : Work week calendar**

3rd Line : Device name + PKG CODE

- **T : TO-220 PKG code**
- **F : TO-220F PKG code**

Package Dimensions

TO-220F



Revision History

No	Date	Contents
0	2016-09-07	Initial Brief Datasheet Release
1	2019-01-04	Junction Capacitance Update

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