FFPF10F150S

10 A, 1500 V, Damper Diode

Features

- High Speed Recovery $t_{RR} = 170 \text{ ns} (@ I_F = 1 \text{ A})$
- Max Forward Voltage, $V_F = 1.6 V (@ T_C = 25^{\circ}C)$
- 1500 V Reverse Voltage and High Reliability
- Low Forward Voltage
- This Device is Pb-Free and is RoHS Compliant

Applications

• Suitable for Damper Diode in Horizontal Deflection Circuits

ABSOLUTE MAXIMUM RATINGS

 $T_C = 25^{\circ}C$ unless otherwise noted

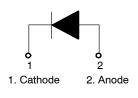
Symbol	Parameter	Rating	Unit
Vrrm	Peak Repetitive Reverse Voltage	1500	V
VRWM	Working Peak Reverse Voltage	1500	V
lf(AV)	Average Rectified Forward Current @ T_{C} = 125°C	10	A
IFSM	Non-repetitive Peak Surge Current 60Hz Single Half-Sine Wave	100	A
Тј, Тѕта	Operating Junction and Storage Temperature	– 65 to +175	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.



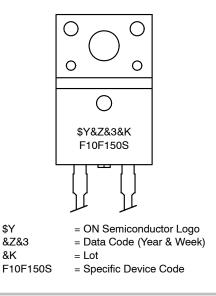
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MARKING DIAGRAM



ORDERING INFORMATION

See detailed ordering and shipping information on page 2 of this data sheet.

FFPF10F150S

THERMAL CHARACTERISTICS $T_C = 25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Max.	Unit
Rejc	Maximum Thermal Resistance, Junction to Case	3.0	°C/W

PACKAGE MARKING AND ORDERING INFORMATION

Part Number	Top Mark	Package	Packing Method	Reel Size	Tape Width	Quantity
FFPF10F150STU	F10F150S	TO-220F-2L	Tube	N/A	N/A	30

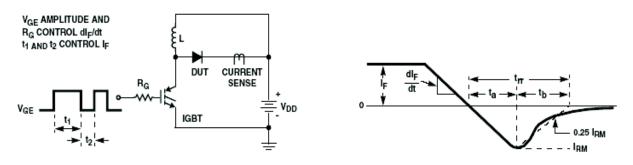
ELECTRICAL CHARACTERISTICS $T_C = 25^{\circ}C$ unless otherwise noted

Parameter	Conditions		Min.	Тур.	Max.	Unit
V _F (Note 1)	Maximum Instantaneous Forward Voltage I _F = 10 A I _F = 10 A	T _C = 25°C T _C = 125°C			1.6 1.4	V
I _R (Note 1)	Maximum Instantaneous Reverse Current @ rated V _R	T _C = 25°C T _C = 125°C			10 80	μΑ
t _{RR}	Maximum Reverse Recovery Time (I _F = 1 A, di _F /dt = 50 A/ μ s, V _R = 30 V)		-	-	170	ns
t _{FR}	Maximum Forward Recovery Time (I _F = 6.5 A, di _F /dt = 50 A/ μ s)		-	-	250	ns
V _{FRM}	Maximum Forward Recovery Voltage		-	-	14	V

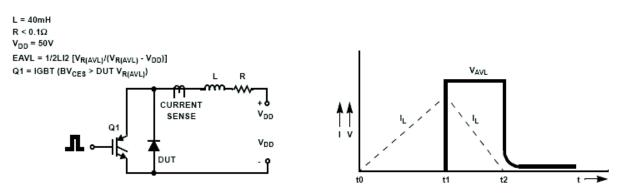
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

1. Pulse: Test Pulse Width = $300 \ \mu s$, Duty Cycle = 2%

Test Circuit and Waveforms



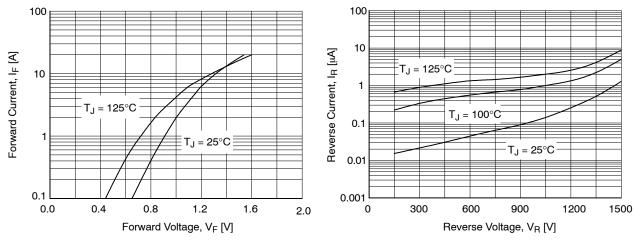






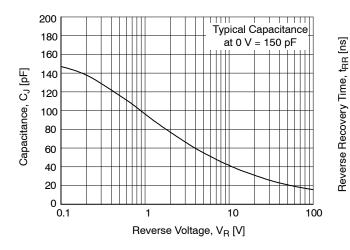
FFPF10F150S

TYPICAL CHARACTERISTICS











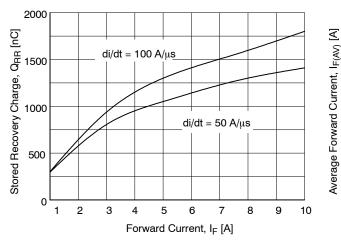


Figure 7. Typical Stored Charge

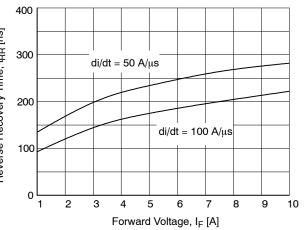


Figure 6. Typical Reverse Recovery Time

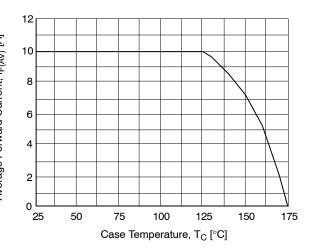
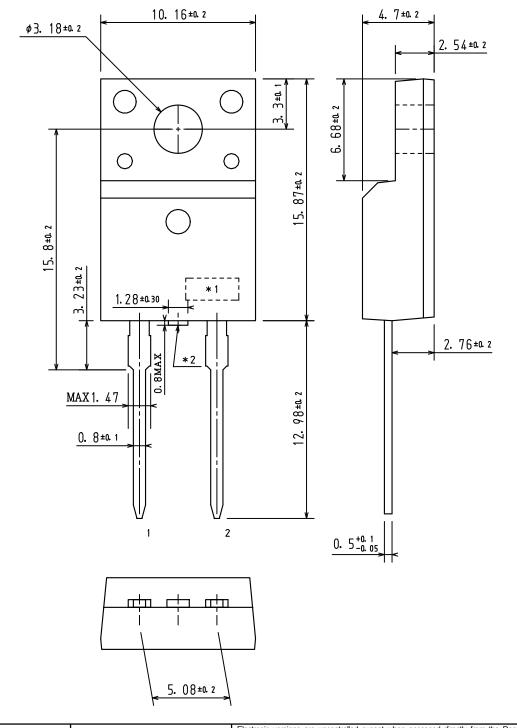


Figure 8. Forward Current Deration Curve



TO-220 Fullpack, 2-Lead / TO-220F-2FS CASE 221AS ISSUE O

DATE 29 FEB 2012



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DESCRIPTION:	TO-220 FULLPACK, 2-LEAD / TO-220F-2FS		PAGE 1 OF 1		

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