

FFPF10F150S

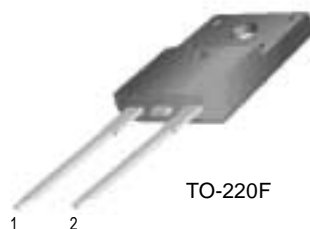
10 A, 1500 V, Damper Diode

Features

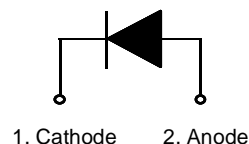
- High Speed Recovery $t_{rr} = 170$ ns (@ $I_F = 1$ A)
- Max Forward Voltage, $V_F = 1.6$ V (@ $T_C = 25^\circ\text{C}$)
- 1500 V Reverse Voltage and High Reliability
- Low Forward Voltage

Applications

- Suitable for Damper Diode in Horizontal Deflection Circuits



TO-220F



Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	1500	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_C = 125^\circ\text{C}$	10	A
I_{FSM}	Non-repetitive Peak Surge Current 60Hz Single Half-Sine Wave	100	A
T_J, T_{STG}	Operating Junction and Storage Temperature	- 65 to +150	$^\circ\text{C}$

Thermal Characteristics

Symbol	Parameter	Value	Unit
$R_{\theta JC}$	Maximum Thermal Resistance, Junction to Case	3.0	$^\circ\text{C/W}$

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

Symbol	Parameter	Min.	Typ.	Max.	Unit	
V_F^*	Maximum Instantaneous Forward Voltage $I_F = 10\text{A}$	$T_C = 25^\circ\text{C}$	-	-	1.6	V
		$T_C = 125^\circ\text{C}$	-	-	1.4	
I_R^*	Maximum Instantaneous Reverse Current @ rated V_R	$T_C = 25^\circ\text{C}$	-	-	10	μA
		$T_C = 125^\circ\text{C}$	-	-	80	
t_{rr}	Maximum Reverse Recovery Time ($I_F = 1$ A, $di/dt = 50$ A/ μs)	-	-	170	ns	
t_{fr}	Maximum Forward Recovery Time ($I_F = 6.5$ A, $di/dt = 50$ A/ μs)	-	-	250	ns	
V_{FRM}	Maximum Forward Recovery Voltage	-	-	14	V	

* Pulse Test: Pulse Width=300 μs , Duty Cycle=2%

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Typical Characteristics

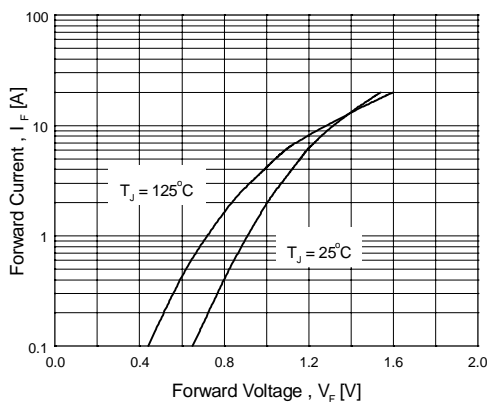


Figure 1. Typical Forward Voltage Drop vs. Forward Current

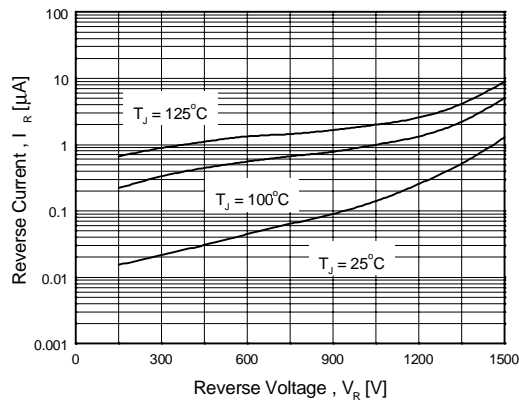


Figure 2. Typical Reverse Current vs. Reverse Voltage

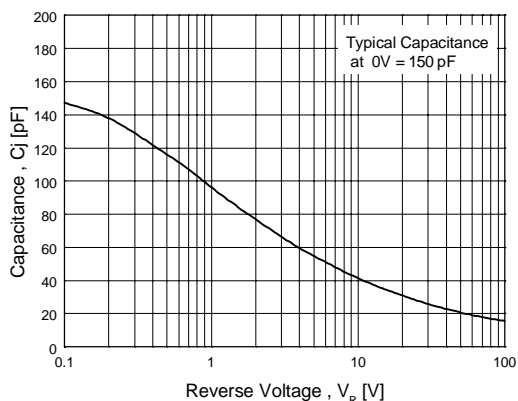


Figure 3. Typical Junction Capacitance

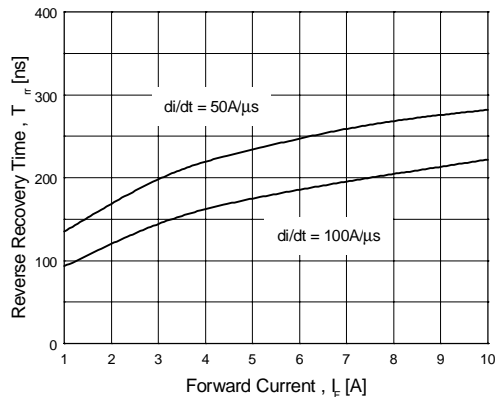


Figure 4. Typical Reverse Recovery Time vs. Forward Current

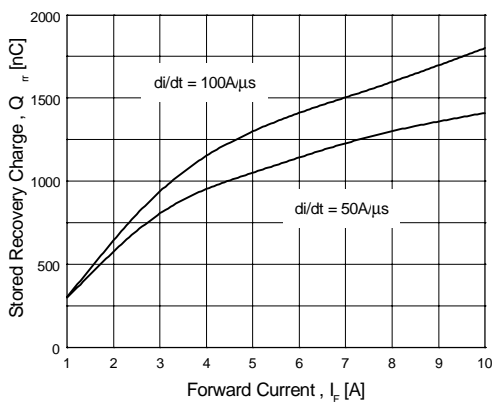


Figure 5. Typical Stored Charge vs. Forward Current

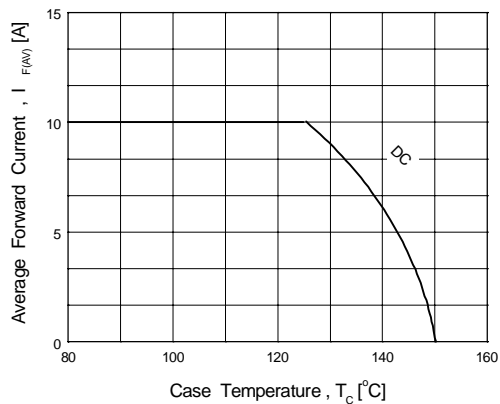
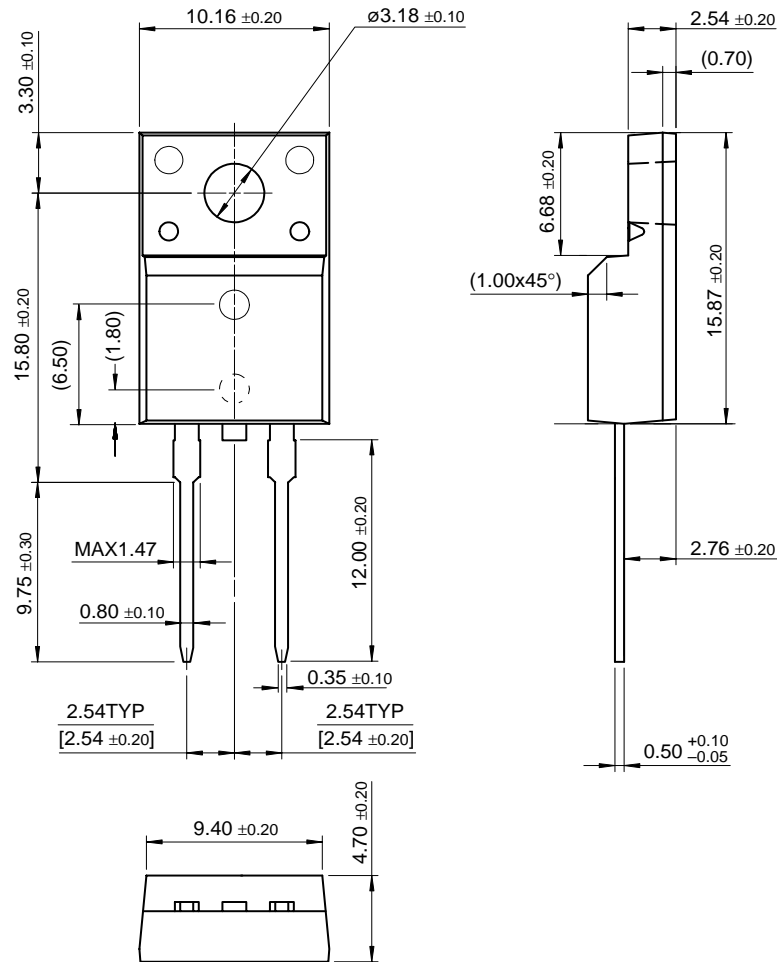


Figure 6. Forward Current Derating Curve

Package Dimensions

TO-220F 2L




Dimensions in Millimeters

FFPF10F150S 10 A, 1500 V, Damper Diode



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