

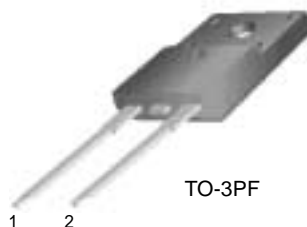
FFAF10U170S

Features

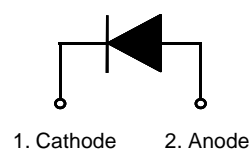
- High voltage and high reliability
- High speed switching
- Low forward voltage

Applications

- Suitable for damper diode in horizontal deflection circuits



TO-3PF



DAMPER DIODE

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

Symbol	Parameter	Value	Units
V_{RRM}	Peak Repetitive Reverse Voltage	1700	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	Units
$R_{\theta JC}$	Maximum Thermal Resistance, Junction to Case	1.5	$^\circ\text{C/W}$

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

Symbol	Parameter	Min.	Typ.	Max.	Units	
V_{FM}^*	Maximum Instantaneous Forward Voltage $I_F = 10\text{A}$ $I_F = 10\text{A}$	$T_C = 25^\circ\text{C}$	-	-	2.2	V
		$T_C = 125^\circ\text{C}$	-	-	2.0	
I_{RM}^*	Maximum Instantaneous Reverse Current @ rated V_R	$T_C = 25^\circ\text{C}$	-	-	0.1	mA
		$T_C = 125^\circ\text{C}$	-	-	10	
t_{rr}	Maximum Reverse Recovery Time ($I_F = 1\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$)	-	-	140	ns	
t_{fr}	Maximum Forward Recovery Time ($I_F = 6.5\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$)	-	-	400	ns	
V_{FRM}	Maximum Forward Recovery Voltage	-	-	13	V	

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

Typical Characteristics

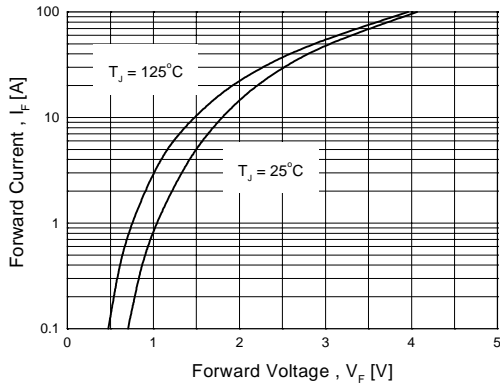


Figure 1. Typical Forward Voltage Drop vs. Forward Current

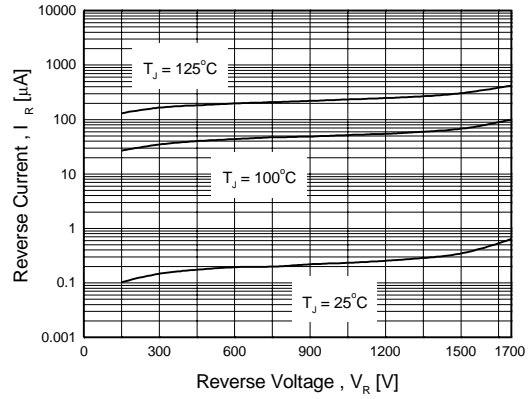


Figure 2. Typical Reverse Current vs. Reverse Voltage

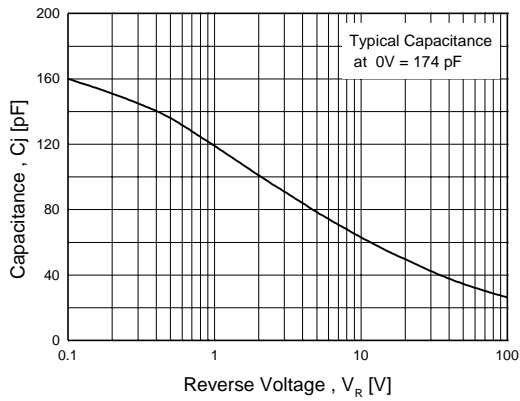


Figure 3. Typical Junction Capacitance

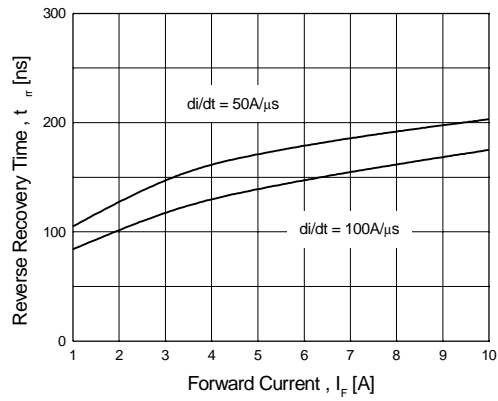


Figure 4. Typical Reverse Recovery Time vs. Forward Current

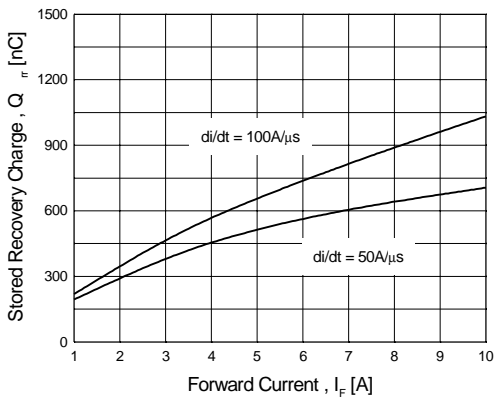


Figure 5. Typical Stored Charge vs. Forward Current

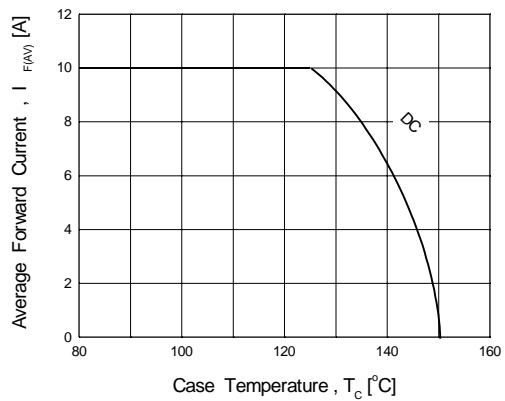
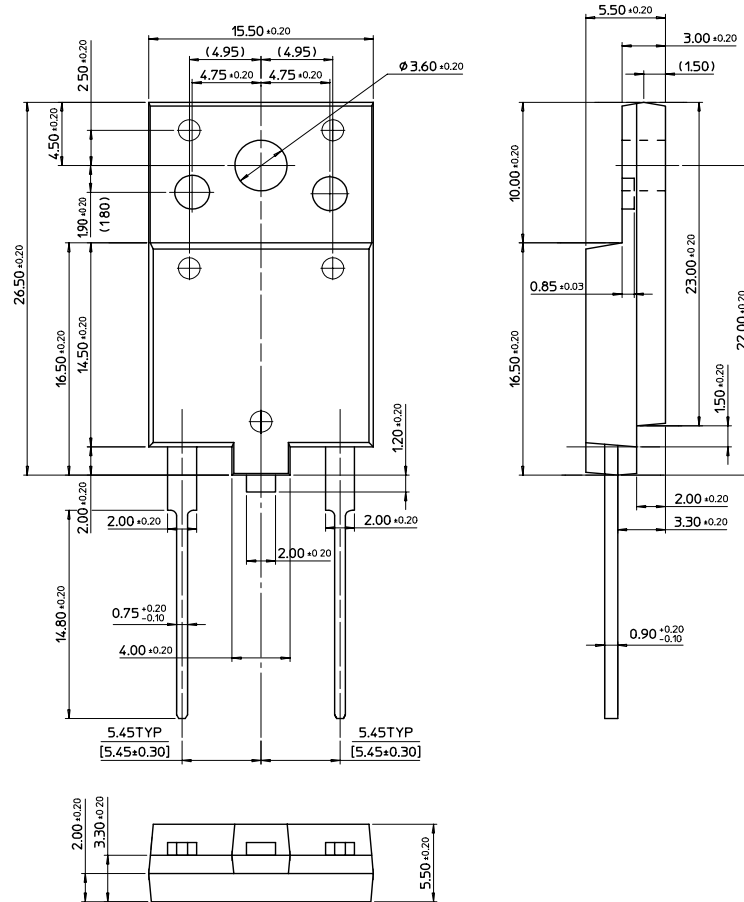


Figure 6. Forward Current Derating Curve

Package Dimensions

TO-3PF-2L

FFAF10U170S



Dimensions in Millimeters

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Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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FFAF10U170S
10A/1700V Damper Diode

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Features

- High voltage and high reliability
- High speed switching
- Low forward voltage

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Applications

- Suitable for damper diode in horizontal deflection circuits

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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
FFAF10U170STU	Full Production	\$1.22	TO-3PF	2	RAIL

* 1,000 piece Budgetary Pricing

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