

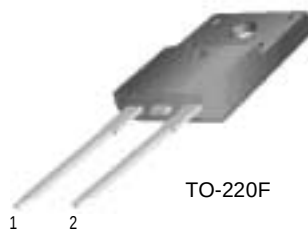
FFPF04F150S

Features

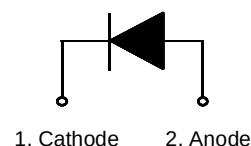
- High voltage and high reliability
- High speed switching
- Low forward voltage

Applications

- Suitable for damper diode in horizontal deflection circuits



TO-220F



DAMPER DIODE

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

Symbol	Parameter	Value	Units
V_{RRM}	Peak Repetitive Reverse Voltage	1500	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_C = 125^\circ\text{C}$	4	A
I_{FSM}	Non-repetitive Peak Surge Current 60Hz Single Half-Sine Wave	40	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	5.0	$^\circ\text{C/W}$

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

Symbol	Parameter	Min.	Typ.	Max.	Units
V_{FM}^*	Maximum Instantaneous Forward Voltage				V
	$I_F = 4\text{A}$	$T_C = 25^\circ\text{C}$	-	-	1.5
	$I_F = 4\text{A}$	$T_C = 125^\circ\text{C}$	-	-	1.4
I_{RM}^*	Maximum Instantaneous Reverse Current				μA
	@ rated V_R	$T_C = 25^\circ\text{C}$	-	-	5
		$T_C = 125^\circ\text{C}$	-	-	250
t_{rr}	Maximum Reverse Recovery Time ($I_F = 1\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$)	-	-	170	ns
t_{fr}	Maximum Forward Recovery Time ($I_F = 6.5\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$)	-	-	450	ns
V_{FRM}	Maximum Forward Recovery Voltage	-	-	19	V

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

Typical Characteristics

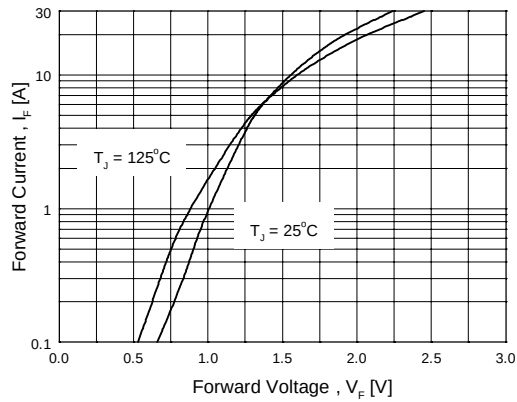


Figure 1. Typical Forward Voltage Drop vs. Forward Current

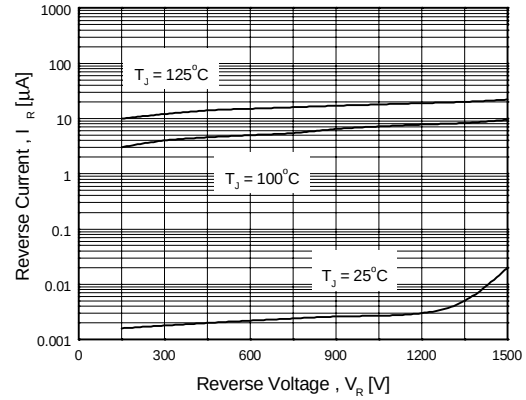


Figure 2. Typical Reverse Current vs. Reverse Voltage

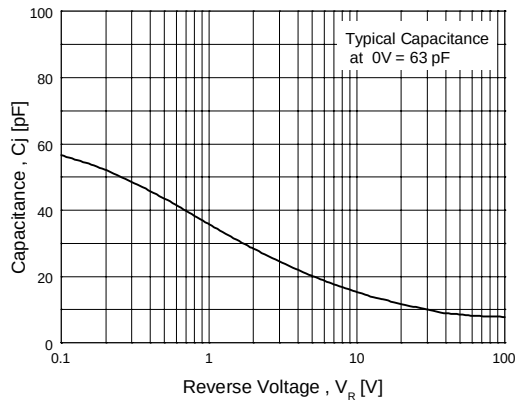


Figure 3. Typical Junction Capacitance

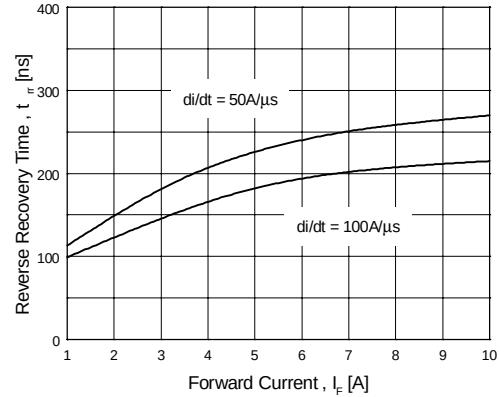


Figure 4. Typical Reverse Recovery Time vs. Forward Current

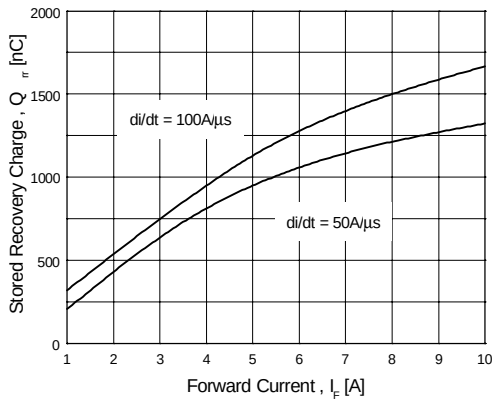


Figure 5. Typical Stored Charge vs. Forward Current

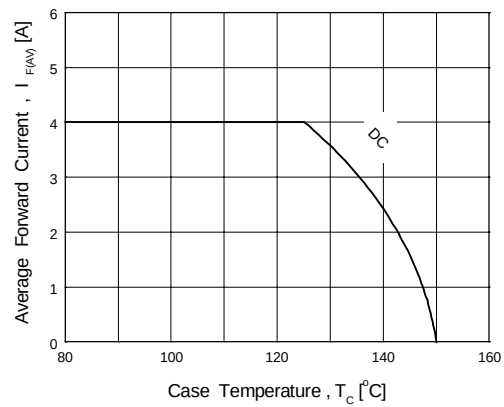


Figure 6. Forward Current Derating Curve

Technical drawing of a mechanical part, likely a connector or probe assembly, showing three views: Front View, Side View, and Bottom View.

Front View Dimensions:

- Total width: 10.16 ± 0.20
- Top section height: 3.30 ± 0.10
- Main body height: 15.80 ± 0.20
- Internal feature height: (6.50)
- Feature diameter: $\phi 3.18 \pm 0.10$
- Feature offset: (1.80)
- Bottom section height: 9.75 ± 0.30
- MAX1.47 (Maximum length of internal feature)
- Offset from centerline: 0.80 ± 0.10
- Tip thickness: 0.35 ± 0.10
- Overall height from base: 12.00 ± 0.20
- Material specification: 2.54TYP over $[2.54 \pm 0.20]$

Side View Dimensions:

- Top flange width: 2.54 ± 0.20
- Flange thickness: (0.70)
- Body height: 6.68 ± 0.20
- Chamfer angle: $(1.00 \times 45^\circ)$
- Overall height from base: 15.87 ± 0.20
- Base offset: 2.76 ± 0.20
- Bottom flange width: $0.50^{+0.10}_{-0.05}$

Bottom View Dimensions:

- Width between features: 9.40 ± 0.20
- Depth: 4.70 ± 0.20

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