

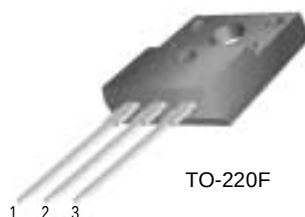
FFPF10U20DN

Features

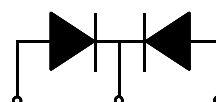
- Ultrafast with soft recovery
- Low forward voltage

Applications

- Power switching circuits
- Output rectifiers
- Freewheeling diodes
- Switching mode power supply



TO-220F



1. Anode 2. Cathode 3. Anode

ULTRA FAST RECOVERY POWER RECTIFIER

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

Symbol	Parameter	Value	Units
V_{RRM}	Peak Repetitive Reverse Voltage	200	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_C = 100^\circ\text{C}$	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	5.0	$^\circ\text{C/W}$

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

Symbol	Parameter	Min.	Typ.	Max.	Units
V_{FM}^*	Maximum Instantaneous Forward Voltage				V
	$I_F = 10\text{A}$	-	-	1.2	
	$I_F = 10\text{A}$	-	-	1.0	
I_{RM}^*	Maximum Instantaneous Reverse Current				μA
	@ rated V_R				
	$T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$	- -	- -	10 100	
t_{rr}	Maximum Reverse Recovery Time	-	-	35	ns
I_{rr}	Maximum Reverse Recovery Current	-	-	2.5	A
Q_{rr}	Maximum Reverse Recovery Charge ($I_F=10\text{A}$, $di/dt = 200\text{A}/\mu\text{s}$)	-	-	45	nC
W_{AVL}	Avalanche Energy	0.5	-	-	mJ

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