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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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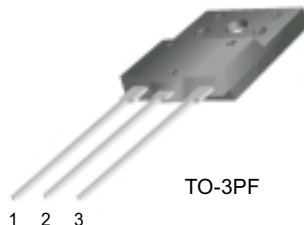
## FYAF3004DN

### Features

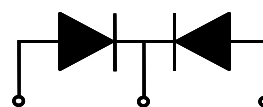
- Low forward voltage drop
- High frequency properties and switching speed
- Guard ring for over-voltage protection

### Applications

- Switched mode power supply
- Freewheeling diodes



TO-3PF



1. Anode 2. Cathode 3. Anode

## SCHOTTKY BARRIER RECTIFIER

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

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	40	V
$V_R$	Maximum DC Reverse Voltage	40	V
$I_{F(AV)}$	Maximum Average Rectified Current @ $T_C = 120^\circ\text{C}$	30	A
$I_{FSM}$	Maximum Forward Surge Current (per diode) 60Hz Single Half-Sine Wave	300	A
$T_J, T_{STG}$	Operating Junction and Storage Temperature	-40 to +150	$^\circ\text{C}$

### Thermal Characteristics

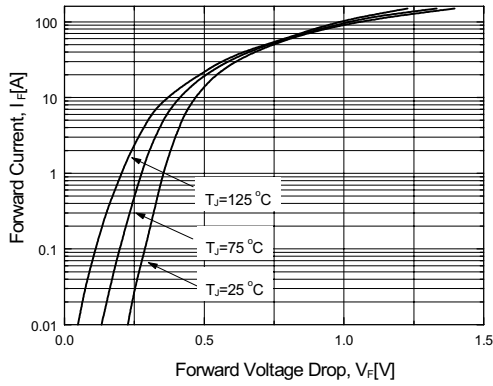
Symbol	Parameter	Value	Units
$R_{\theta JC}$	Maximum Thermal Resistance, Junction to Case (per diode)	2.2	$^\circ\text{C}/\text{W}$

### Electrical Characteristics (per diode)

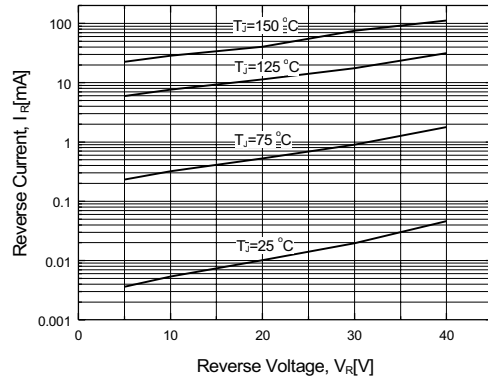
Symbol	Parameter	Value	Units
$V_{FM}^*$	Maximum Instantaneous Forward Voltage $I_F = 15\text{A}$ $I_F = 15\text{A}$ $I_F = 30\text{A}$ $I_F = 30\text{A}$	$T_C = 25^\circ\text{C}$	0.55
		$T_C = 125^\circ\text{C}$	0.49
		$T_C = 25^\circ\text{C}$	0.67
		$T_C = 125^\circ\text{C}$	0.65
$I_{RM}^*$	Maximum Instantaneous Reverse Current @ rated $V_R$	$T_C = 25^\circ\text{C}$	1
		$T_C = 125^\circ\text{C}$	120

\* Pulse Test: Pulse Width=300 $\mu\text{s}$ , Duty Cycle=2%

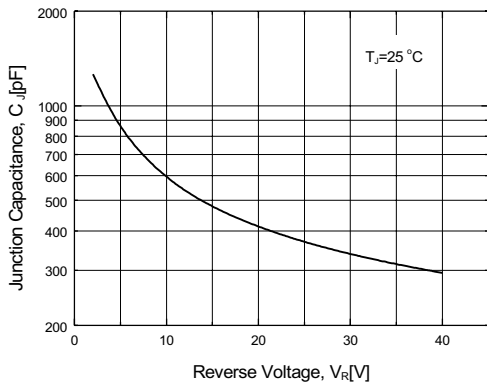
# Typical Characteristics



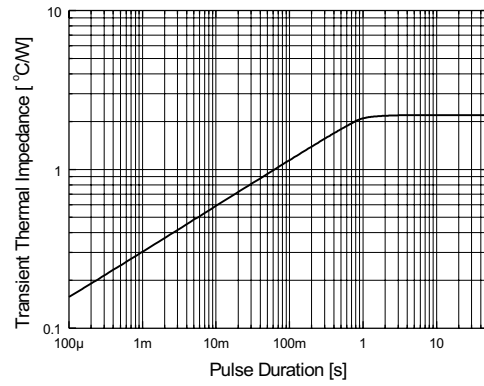
**Figure 1. Typical Forward Voltage Characteristics (per diode)**



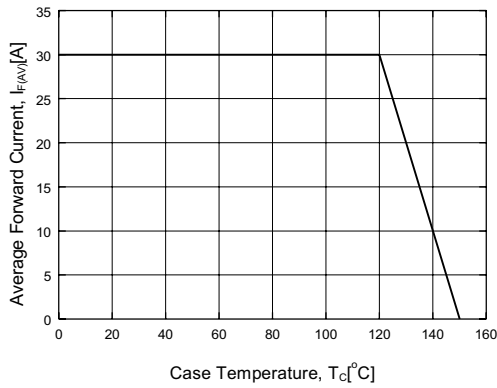
**Figure 2. Typical Reverse Current vs. Reverse Voltage (per diode)**



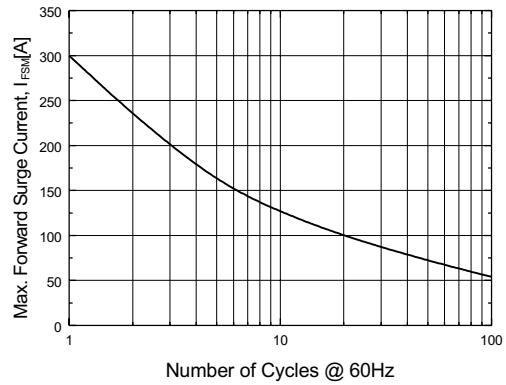
**Figure 3. Typical Junction Capacitance (per diode)**



**Figure 4. Thermal Impedance Characteristics (per diode)**



**Figure 5. Forward Current Derating Curve**

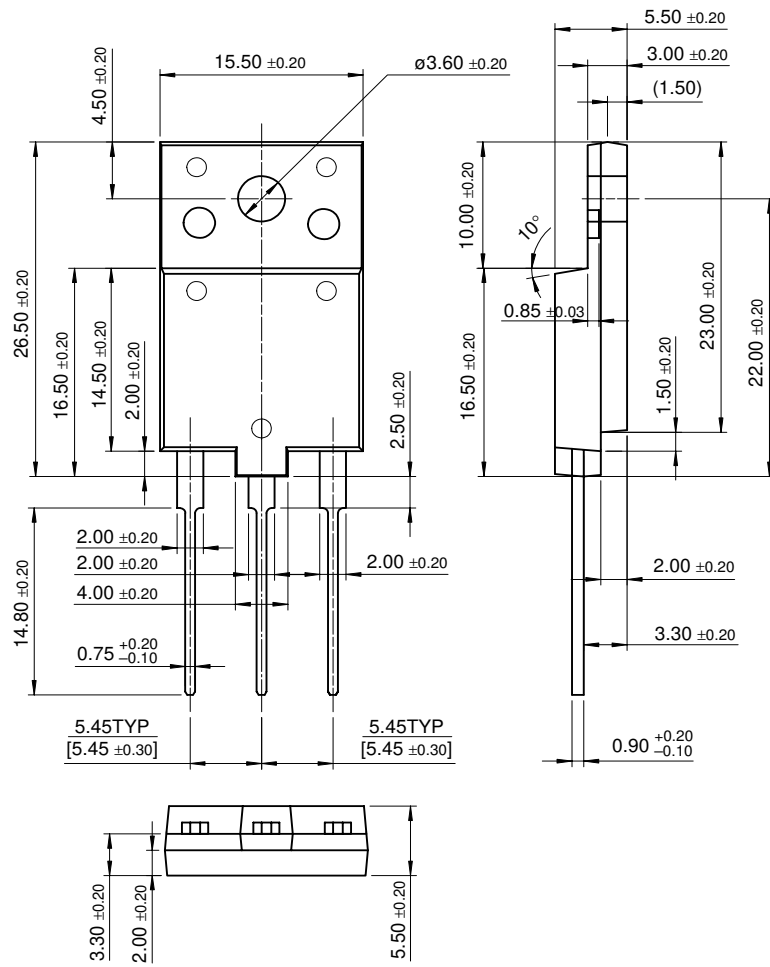


**Figure 6. Non-Repetive Surge Current (per diode)**

# Package Dimensions

## TO-3PF

FYAF3004DN



Dimensions in Millimeters

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