



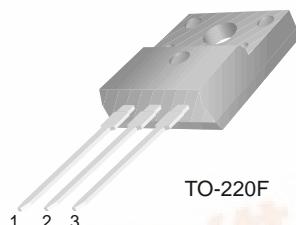
## FYPF1010DN

### Features

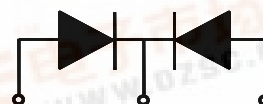
- Low forward voltage drop
- High frequency properties and switching speed
- Guard ring for over-voltage protection

### Applications

- Switched mode power supply
- Freewheeling diodes



TO-220F



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	100	V
$V_R$	Maximum DC Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_C = 125^\circ\text{C}$	10	A
$I_{FSM}$	Non-repetitive Peak Surge Current (per diode) 60Hz Single Half-Sine Wave	100	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)	4.0	$^\circ\text{C/W}$

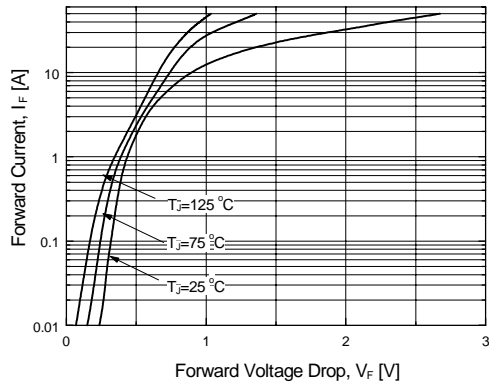
### Electrical Characteristics (per diode)

Symbol	Parameter	Value	Units
$V_{FM}^*$	Maximum Instantaneous Forward Voltage		V
	$I_F = 5\text{A}$ $T_C = 25^\circ\text{C}$	0.75	
	$I_F = 5\text{A}$ $T_C = 125^\circ\text{C}$	0.65	
	$I_F = 10\text{A}$ $T_C = 25^\circ\text{C}$	0.95	
	$I_F = 10\text{A}$ $T_C = 125^\circ\text{C}$	0.73	
$I_{RM}^*$	Maximum Instantaneous Reverse Current @ rated $V_R$		mA
	$T_C = 25^\circ\text{C}$	1	
	$T_C = 125^\circ\text{C}$	30	

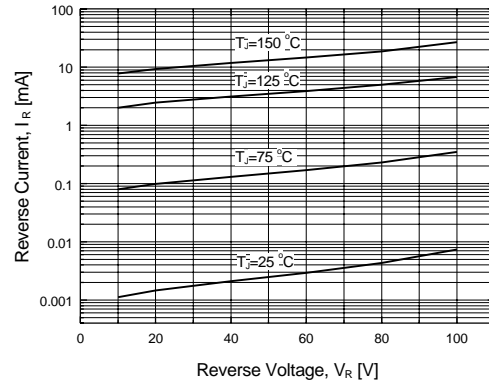
\* Pulse Test: Pulse Width=300 $\mu\text{s}$ , Duty Cycle=2%



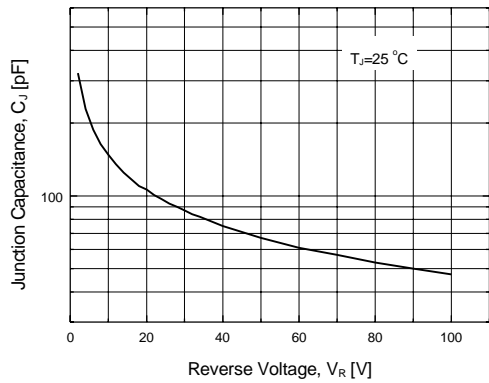
## Typical Characteristics



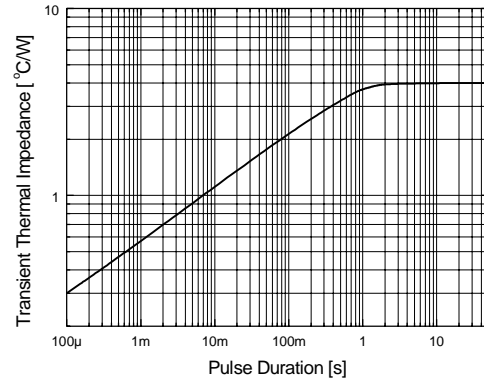
**Figure 1. Typical Forward Voltage Characteristics (per diode)**



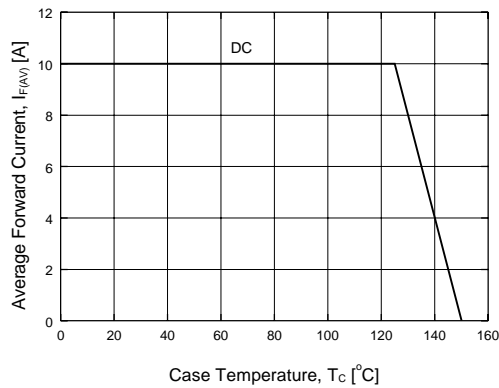
**Figure 2. Typical Reverse Current vs. Reverse Voltage (per diode)**



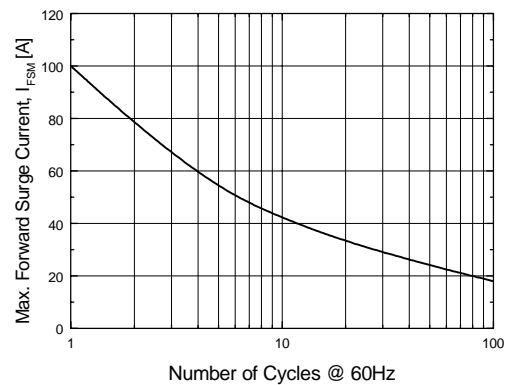
**Figure 3. Typical Junction Capacitance (per diode)**



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



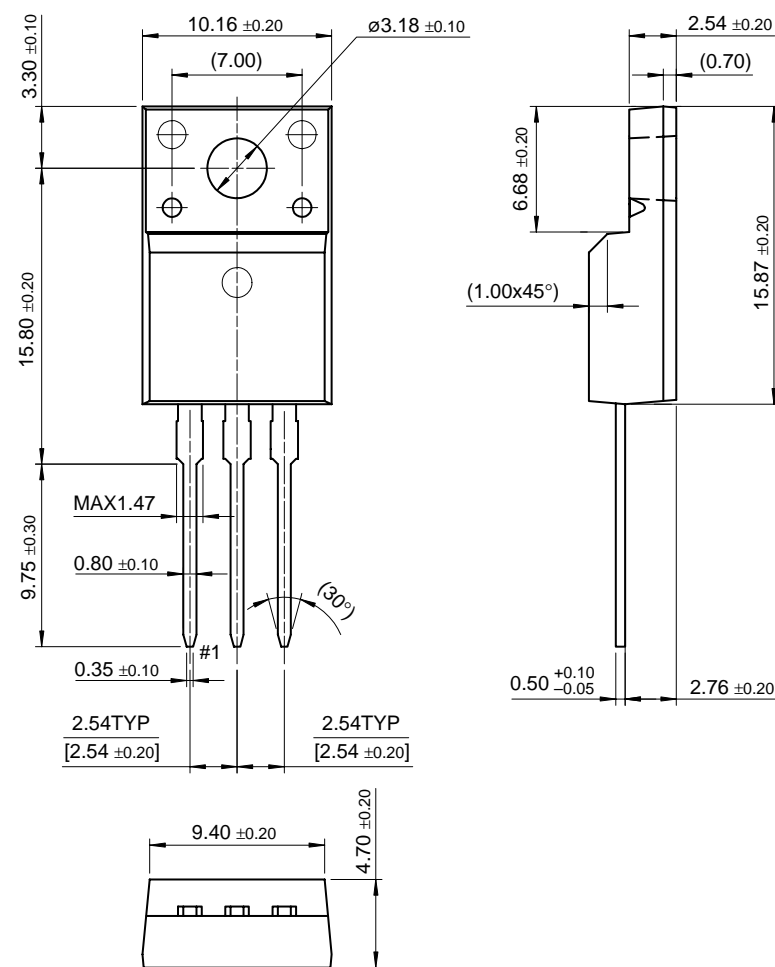
**Figure 5. Forward Current Derating Curve**



**Figure 6. Non-Repetitive Sureg Current (per diode)**

Package Dimensions

TO-220F



Dimensions in Millimeters

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