

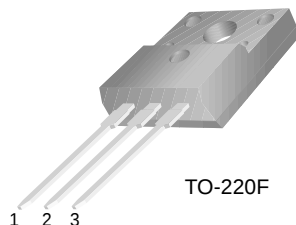
FYPF1010DN

Features

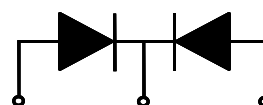
- Low forward voltage drop
- High frequency properties and switching speed
- Guard ring for over-voltage protection

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		mA
	@ rated V_R	$T_C = 25^\circ\text{C}$	1
		$T_C = 125^\circ\text{C}$	30

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

Typical Characteristics

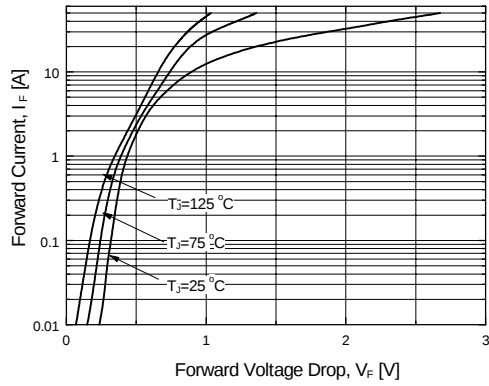


Figure 1. Typical Forward Voltage Characteristics (per diode)

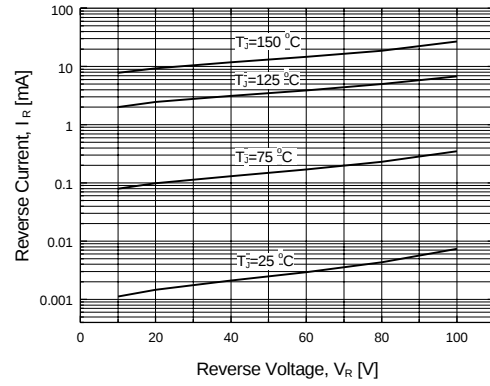


Figure 2. Typical Reverse Current vs. Reverse Voltage (per diode)

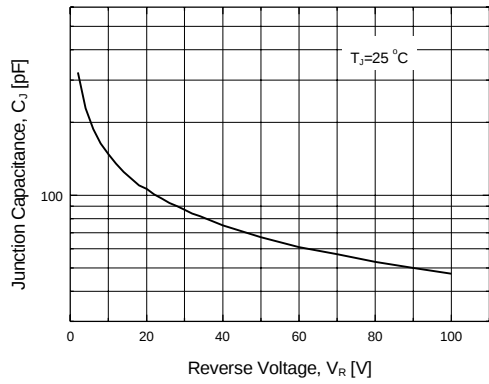


Figure 3. Typical Junction Capacitance (per diode)

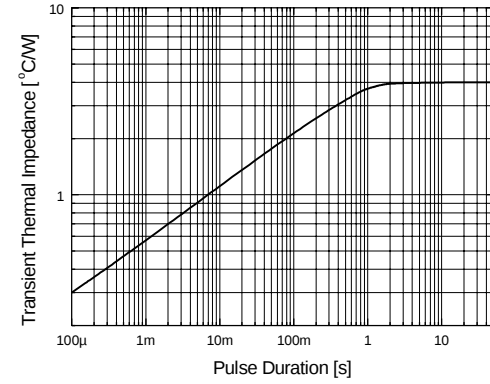


Figure 4. Thermal Impedance Characteristics (per diode)

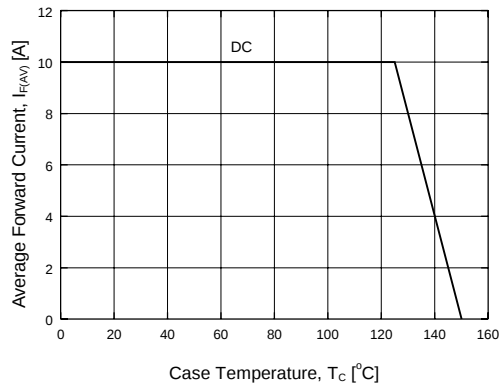


Figure 5. Forward Current Derating Curve

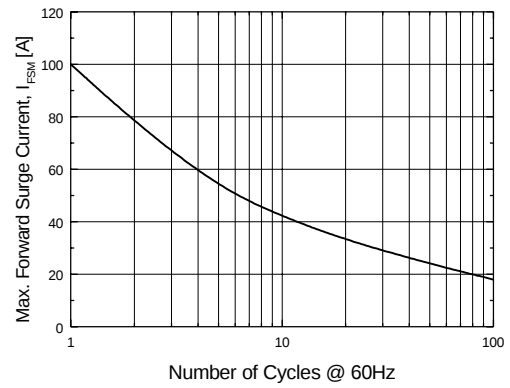
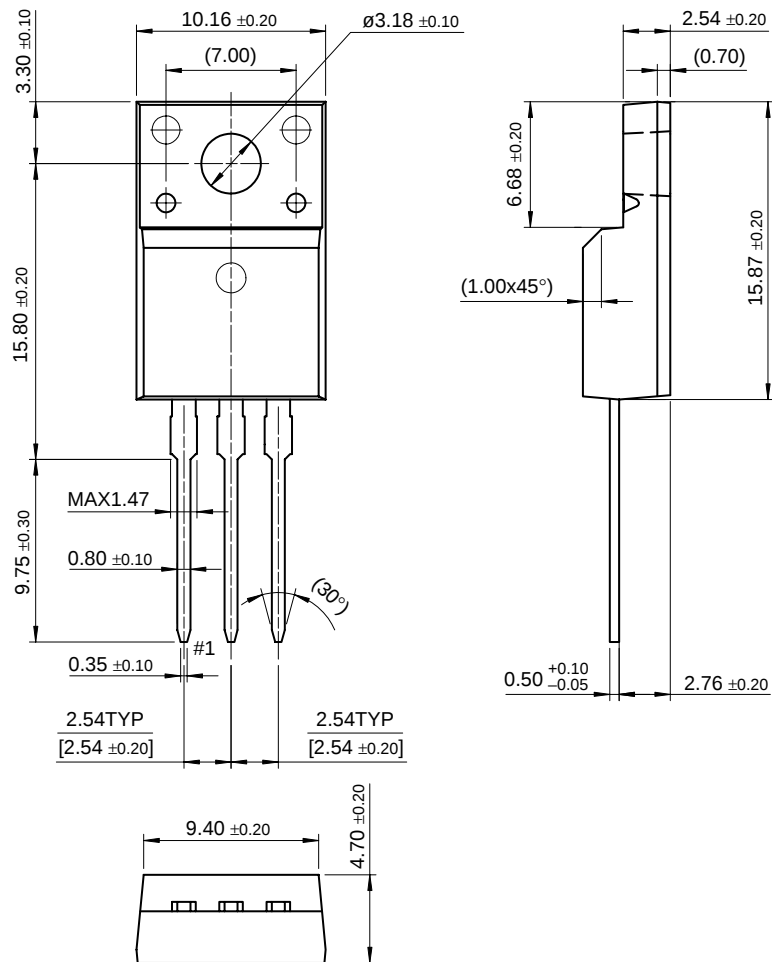


Figure 6. Non-Repetitive Sureg Current (per diode)

Package Dimensions

TO-220F



Dimensions in Millimeters

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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.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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FYPF1010DN

Schottky Barrier Rectifier

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

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Applications

- Switched mode power supply
- Freewheeling diodes

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Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Leads	Packing method
FYPF1010DNTU	Full Production	\$0.60	TO-220F	3	RAIL

* 1,000 piece Budgetary Pricing

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Application notes

[AN-9015: AN-9015 A180W, 100KHz Forward Converter Using QFET](#)
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