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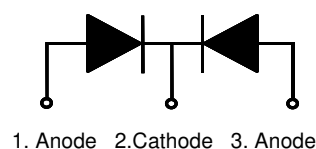
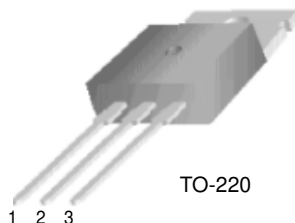
## FYP1504DN

### Features

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

### Applications

- Switched mode power supply
- Freewheeling diodes



## 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
$I_{F(AV)}$	Average Rectified Forward Current @ $T_C = 134^\circ\text{C}$	15	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	-65 to +150	$^\circ\text{C}$

### Thermal Characteristics

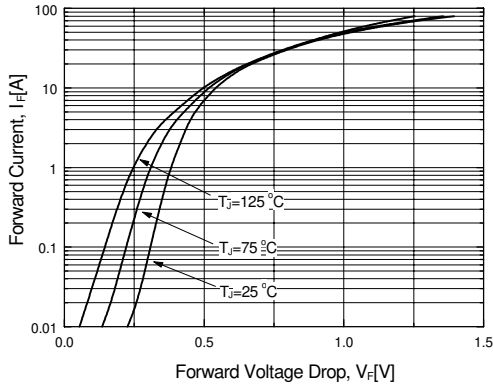
Symbol	Parameter	Value	Units
$R_{\theta JC}$	Maximum Thermal Resistance, Junction to Case (per diode)	2.5	$^\circ\text{C}/\text{W}$

### Electrical Characteristics (per diode)

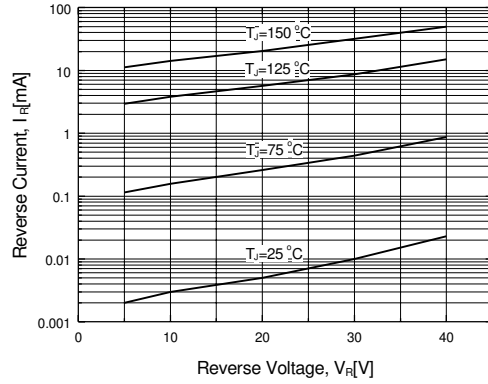
Symbol	Parameter	Value	Units
$V_{FM}^*$	Maximum Instantaneous Forward Voltage $I_F = 7.5\text{A}$ $I_F = 7.5\text{A}$ $I_F = 15\text{A}$ $I_F = 15\text{A}$	$T_C = 25^\circ\text{C}$	0.55
		$T_C = 125^\circ\text{C}$	0.49
		$T_C = 25^\circ\text{C}$	0.67
		$T_C = 125^\circ\text{C}$	0.65
$I_{RM}^*$	Maximum Instantaneous Reverse Current @ rated $V_R$	$T_C = 25^\circ\text{C}$	1
		$T_C = 125^\circ\text{C}$	60

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

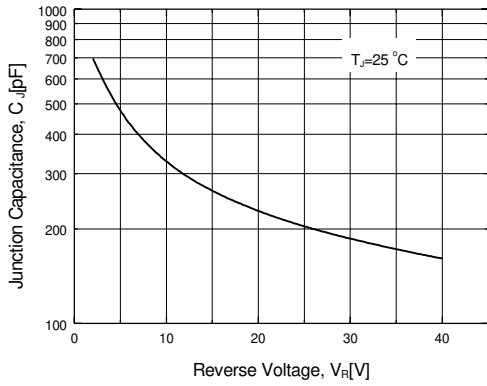
# Typical Characteristics



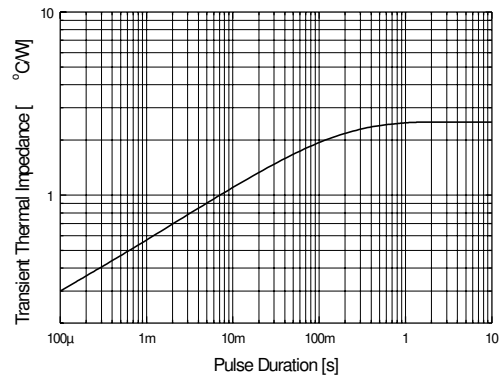
**Figure 1. Typical Forward Voltage Characteristics (per diode)**



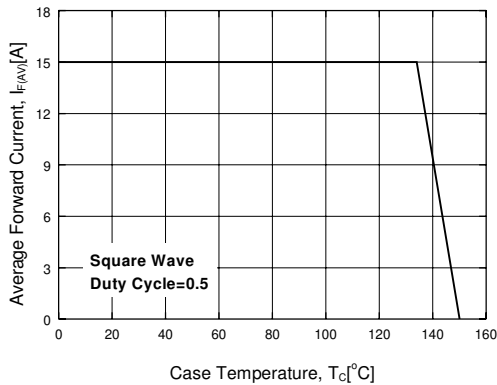
**Figure 2. Typical Reverse Current vs. Reverse Voltage (per diode)**



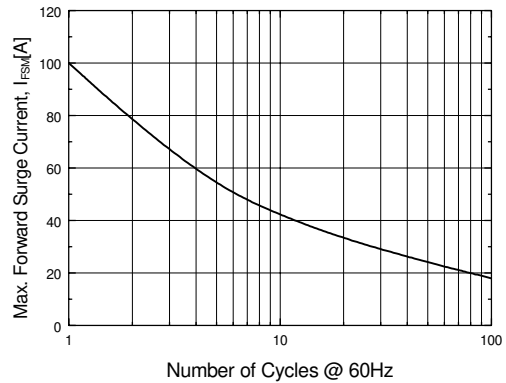
**Figure 3. Typical Junction Capacitance (per diode)**



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



**Figure 5. Forward Current Derating Curve**

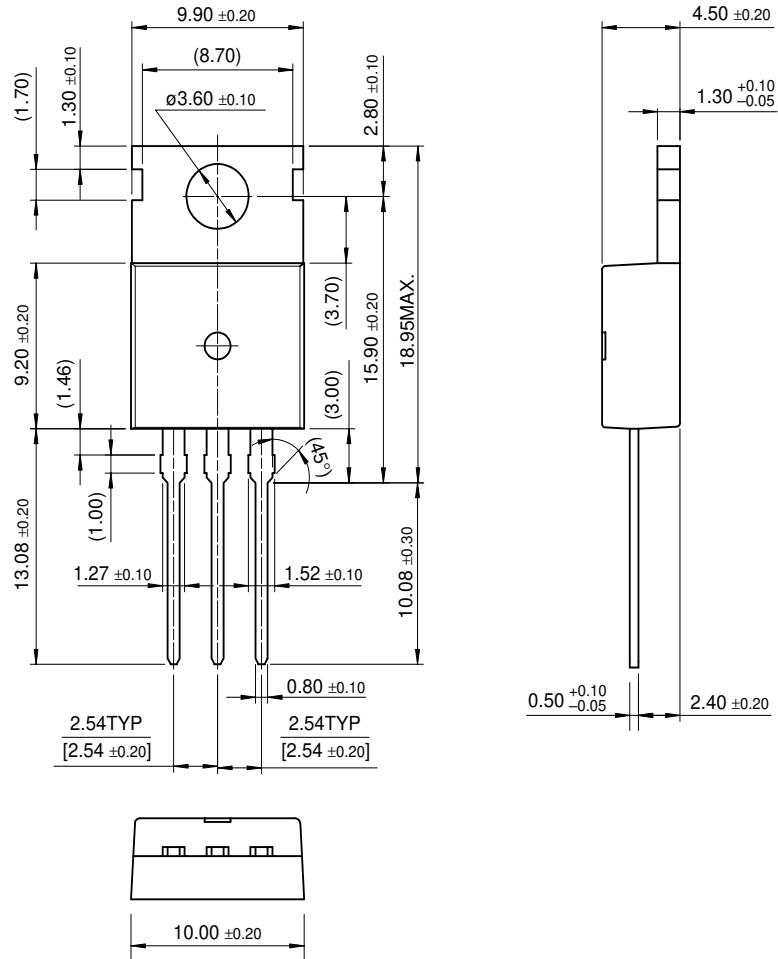


**Figure 6. Non-Repetive Surge Current (per diode)**

# Package Dimensions

FYP1504DN

## TO-220



Dimensions in Millimeters

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CoolFET™	GlobalOptoisolator™	PowerTrench <sup>®</sup>	SuperSOT™-8
CROSSVOLT™	GTO™	QFET™	SyncFET™
DenseTrench™	HiSeC™	QS™	TinyLogic™
DOME™	ISOPLANAR™	QT Optoelectronics™	UHC™
EcoSPARK™	LittleFET™	Quiet Series™	UltraFET <sup>®</sup>
E <sup>2</sup> CMOS™	MicroFET™	SLIENT SWITCHER <sup>®</sup>	VCX™
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