

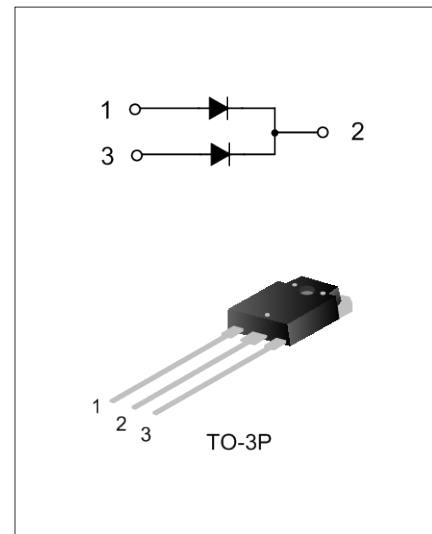
30A, 600V SUPER-FAST RECOVERY RECTIFIER

DESCRIPTION

RFR30F60PN is a Super-Fast Recovery Diode, fabricated in advanced silicon planar epitaxial technology. The process parameter and the device structure are fine tuned with optimized performance of forward voltage drop and reverse recovery time.

Accuracy epitaxial dope control, advanced planar junction terminal structure and the platinum doped life control, guarantee the best overall performance, ruggedness and reliability characteristics.

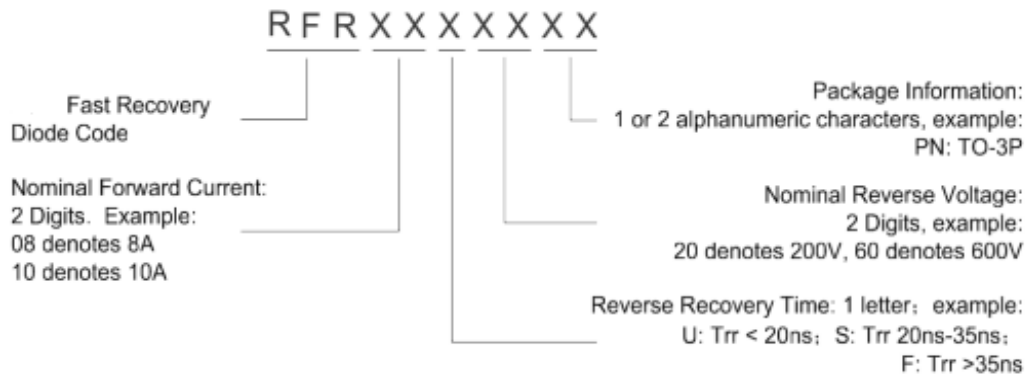
RFR30F60T2/PN is intended for use in the output rectification stage of SMPS, UPS, DC-DC converters as well as free-wheeling diode in low voltage inverters and chopper motor drivers.



FEATURES

- ♦ Ultrafast 60 Nanosecond Recovery Time
- ♦ High current capability
- ♦ Low Forward Voltage Drop
- ♦ High surge current capability
- ♦ Low reverse current leakage
- ♦ 150°C Operating Junction Temperature

NOMENCLATURE



ORDERING INFORMATION

Part No.	Package	Marking	Material	Packing
RFR30F60PN	TO-3P	30F60	Pb free	Tube

RFR30F60PN_Datasheet

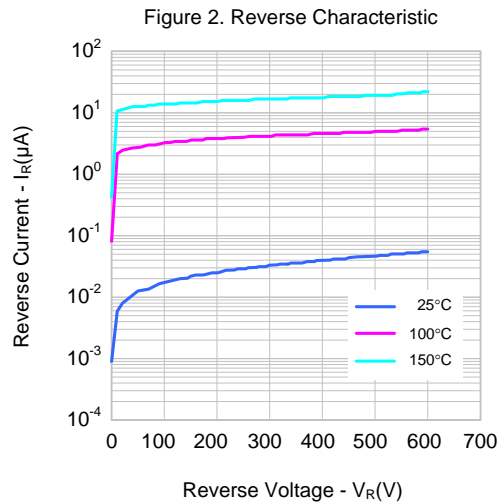
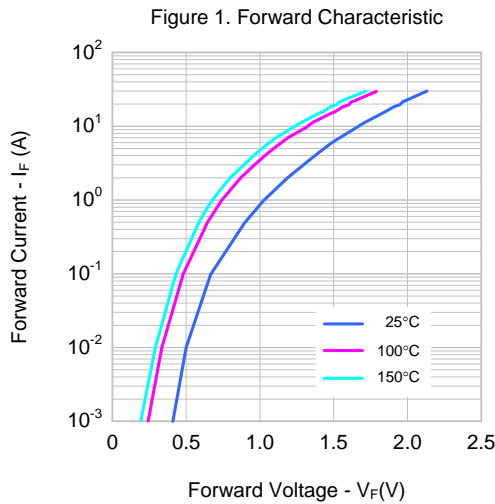
ABSOLUTE MAXIMUM RATINGS

Characteristics		Symbol	Ratings	Unit
Peak Repetitive Reverse Voltage		V_{RRM}	600	V
Average Rectified Forward Current	Per leg	$I_{F(AV)}$	15.0	A
	Total Device		30.0	
Peak Forward Surge Current@8.3ms		I_{FSM}	100	A
Operation Junction Temperature Range		T_J	-40~+150	°C
Storage Temperature Range		T_{stg}	-40~+150	°C

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Maximum Forward Voltage $I_F=15.0$ Amps, $T_C=25^\circ\text{C}$	V_F	--	--	2.6	V
Maximum Instantaneous Reverse Current Rated DC Voltage, $T_C=25^\circ\text{C}$	I_R	--	--	5.0	μA
Maximum Reverse Recovery Time $I_F=0.5$ Amp, $I_R=1.0$ Amp, $I_{REC}=0.25$ Amp	t_{rr}	--	--	60	ns

TYPICAL CHARACTERISTICS CURVE



RFR30F60PN_Datasheet

Figure 3. Power Dissipation (Perleg)

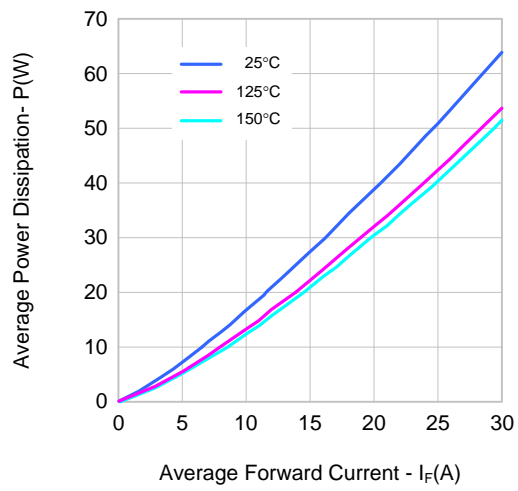
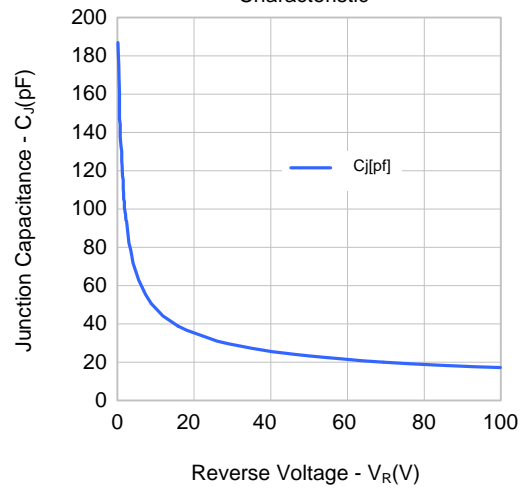


Figure 4. Junction Capacitance Characteristic



PACKAGE OUTLINE

LTO-3P

Unit: mm

