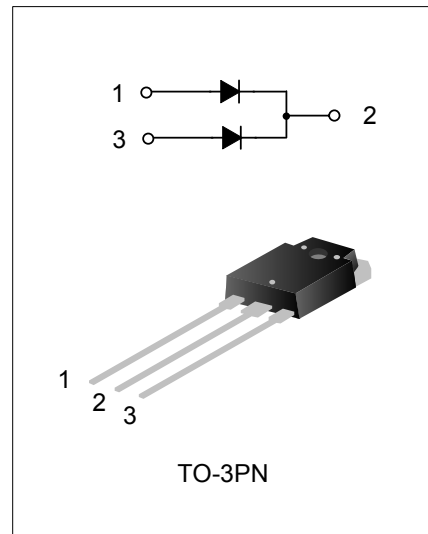


20A, 200V ULTRA-FAST RECOVERY RECTIFIER

GENERAL DESCRIPTION

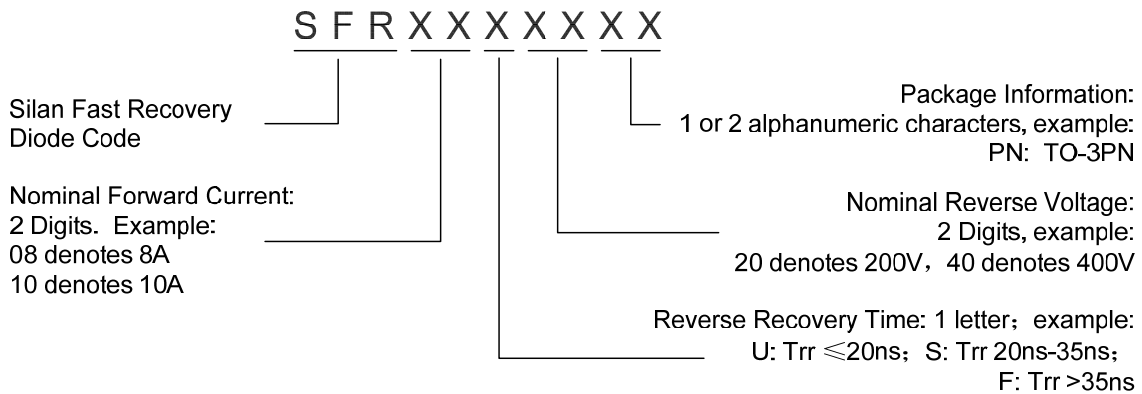
SFR20U20PN is a Ultra-Fast Recovery Diode, fabricated in advanced silicon planar epitaxial technology. The process parameter and the device structure are fine tuned with optimized performance of forward voltage drop and reverse recovery time. Accuracy epitaxial dope control, advanced planar junction terminal structure and the platinum doped life control, guarantee the best overall performance, ruggedness and reliability characteristics. SFR20U20PN 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 20 Nanosecond Recovery Time
- * Low Forward Voltage Drop
- * Low Leakage Current
- * 150 °C Operating Junction Temperature

NOMENCLATURE



ORDERING INFORMATION

Part No.	Package	Marking	Material	Packing
SFR20U20PN	TO-3PN	20U20	Pb free	Tube

ABSOLUTE MAXIMUM RATINGS

Characteristics	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	VRRM	200	V
Average Rectified Forward Current	IF(AV)	10.0	A
Per Leg		20	
Total Device			
Non Repetitive Peak Surge Current	IFSM	100	A
Operation Junction Temperature	TJ	-40~+150	°C
Storage Temperature	Tstg	-40~+150	°C

THERMAL CHARACTERISTICS (Per Leg)

Characteristics	Symbol	Rating	Unit
Thermal Resistance, Junction-to-Case	ReJC	1.5	°C/W

ELECTRICAL CHARACTERISTICS (Per Leg)

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage (Note 1) (IF=10.0 Amps, Tc=25°C)	VF	--	--	0.97	V
Maximum Instantaneous Reverse Current(Note 1) (Rated dc Voltage, Tc=25°C)	IR	--	--	5.0	μA
Maximum Reverse Recovery Time (IF=0.5 Amp, IR=1.0Amp, IREC=0.25Amp)	trr	--	--	20	ns

TYPICAL CHARACTERISTICS

Figure 1. Forward characteristic

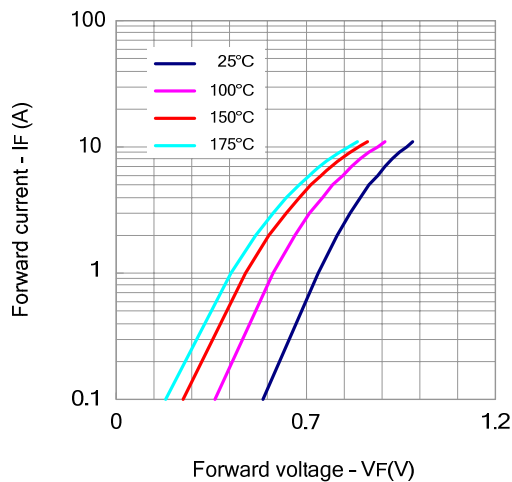
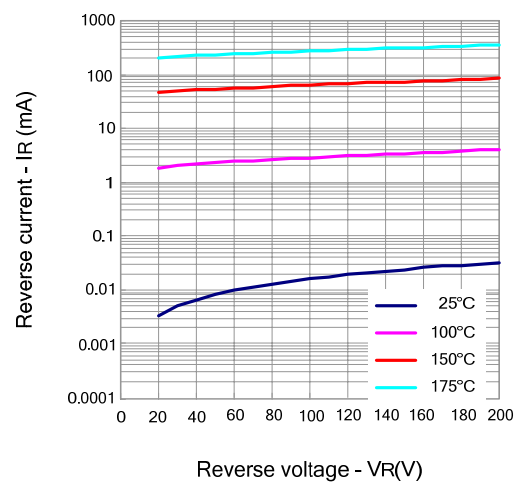
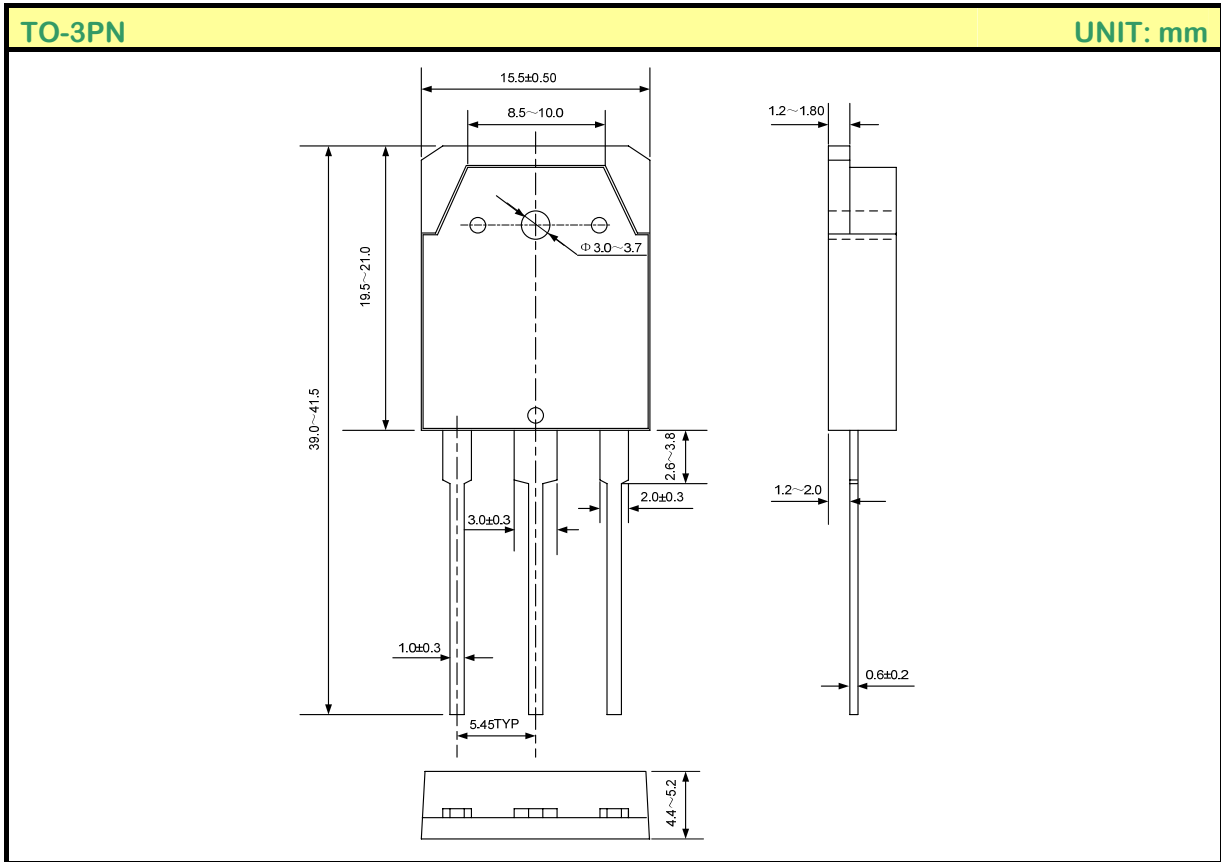


Figure 2. Reverse characteristic



PACKAGE OUTLINE



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- Silan will supply the best possible product for customers!



ATTACHMENT

Revision History

Date	REV	Description	Page
2011.04.28	1.0	Original	