

NF3J

**SURFACE MOUNT
ULTRAFAST RECTIFIER**

VOLTAGE: 600V

CURRENT: 3.0A

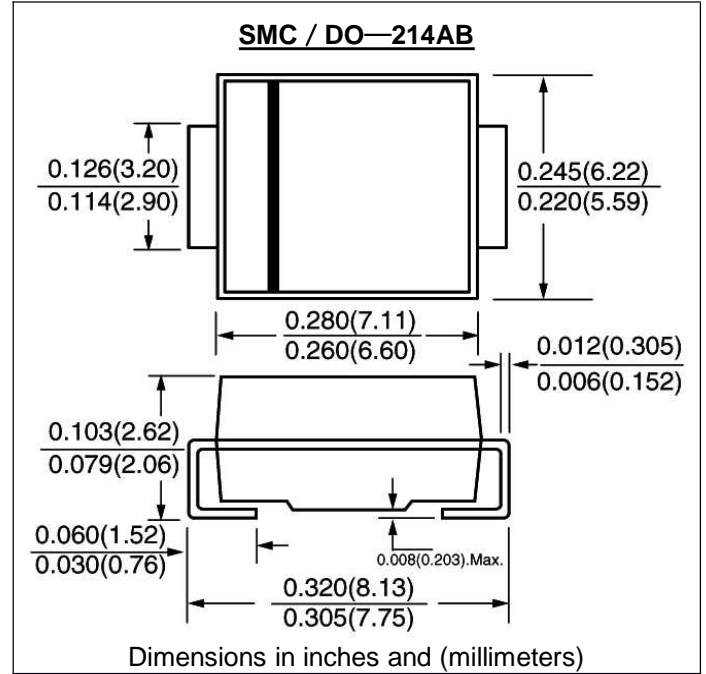


FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260°C/10sec/at terminals
Glass passivated chip
Ultrafast recovery time for high efficiency

MECHANICAL DATA

Terminal: Solder plated, solderable per MIL-STD-750,
Method 2026
Case: JEDEC DO-214AB molded plastic over glass
passivated chip
Polarity: Color band denotes cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	NF3J	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified Current 3/8"lead length at T _L =79°C	If(av)	3.0	A
Non-repetitive Peak Forward Surge Current 50Hz half sine-wave	Ifsm	45.0	A
Maximum Instantaneous Forward Voltage at forward current 3.0A	Vf	1.7	V
Maximum DC Reverse Current at rated DC blocking voltage	Ir	20.0 200.0	μA
Maximum Reverse Recovery Time (Note 1)	Trr	35	nS
Typical Junction Capacitance (Note 2)	Cj	33	pF
Typical Thermal Resistance (Note 3)	Rth(jl)	13	°C/W
Storage and Operating Junction Temperature	Tstg, Tj	-40 to +150	°C

Note:

1. Reverse Recovery Condition Ta =25°C, Ifm =3.0A, -di/dt =50A/us
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES NF3J

Fig. 1 - Forward Current Derating Curve

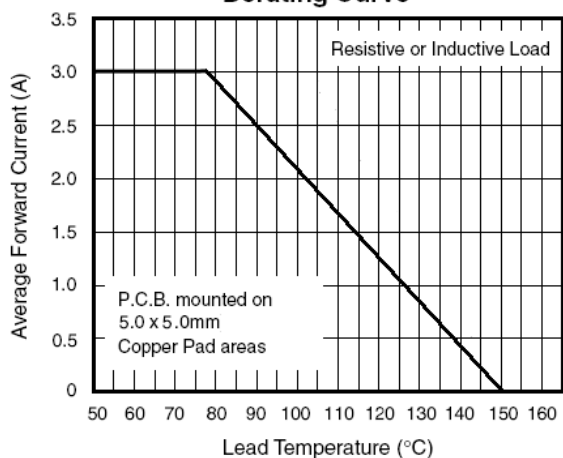


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

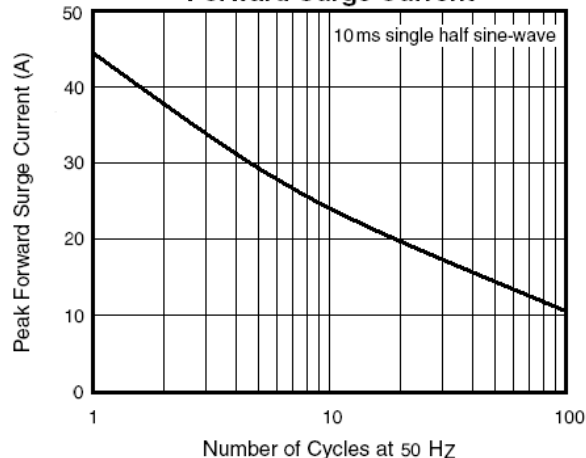


Fig. 3 - Typical Instantaneous Forward Characteristics

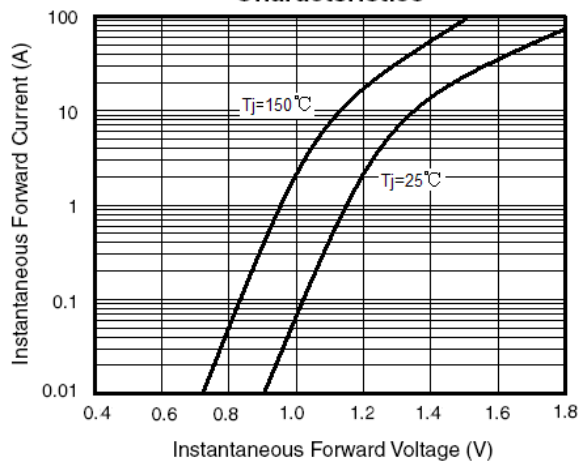


Fig. 4 - Typical Reverse Characteristics

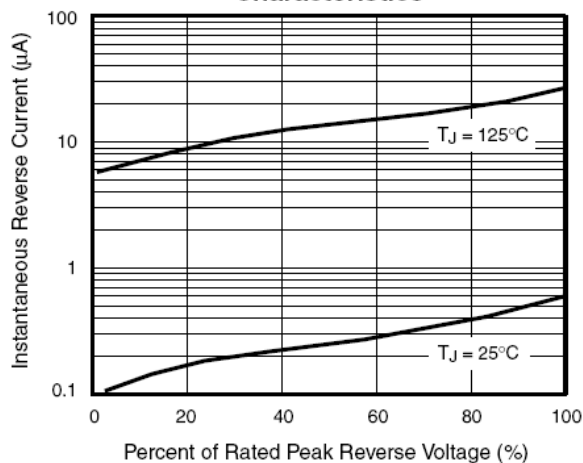


Fig. 5 - Typical Junction Capacitance

