

# NF3G

## SURFACE MOUNT ULTRAFAST RECTIFIER

VOLTAGE: 400V

CURRENT: 3.0A

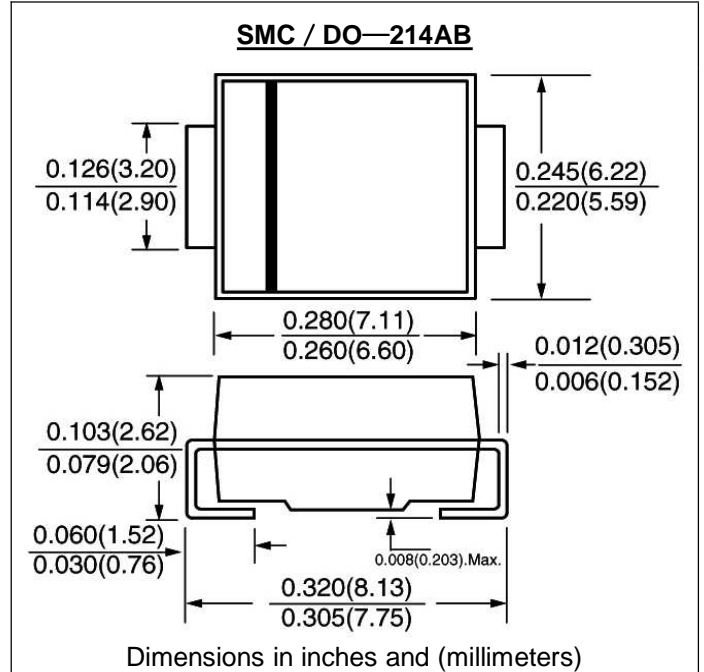


### FEATURE

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%)

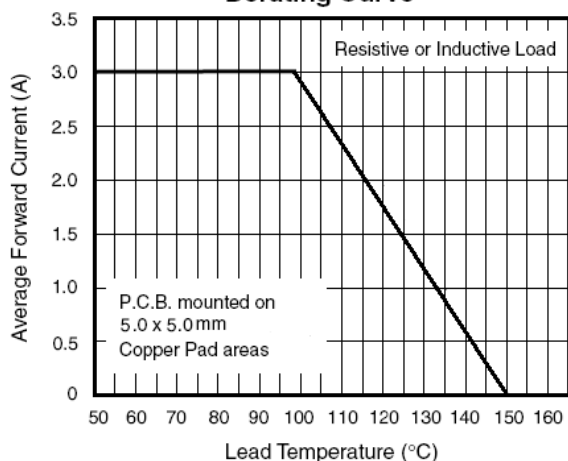
	SYMBOL	NF3G	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	400	V
Maximum RMS Voltage	V <sub>rms</sub>	280	V
Maximum DC blocking Voltage	V <sub>dc</sub>	400	V
Maximum Average Forward Rectified Current 3/8" lead length at T <sub>L</sub> = 99°C	I <sub>f(av)</sub>	3.0	A
Non-repetitive Peak Forward Surge Current 50Hz half sine-wave	I <sub>fsm</sub>	45.0	A
Maximum Instantaneous Forward Voltage at forward current 3.0A	V <sub>f</sub>	1.25	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	20.0 200.0	μA
Maximum Reverse Recovery Time	T <sub>rr</sub>	30	nS
Typical Junction Capacitance	C <sub>j</sub>	33	pF
Typical Thermal Resistance	R <sub>th(jl)</sub>	13	°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-40 to +150	°C

Note:

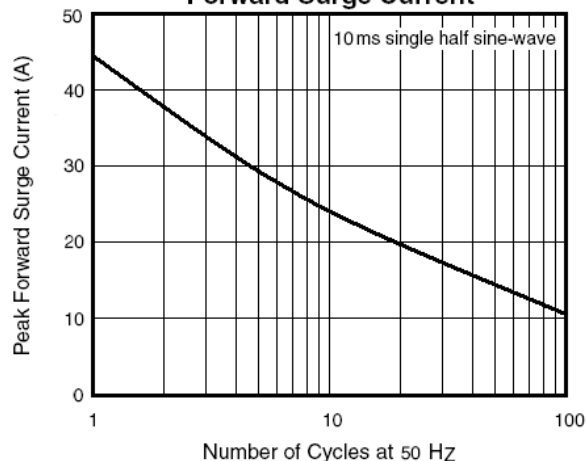
1. Reverse Recovery Condition T<sub>a</sub> = 25°C, I<sub>fm</sub> = 3.0A, -di/dt = 50A/us
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

## RATINGS AND CHARACTERISTIC CURVES NF3G

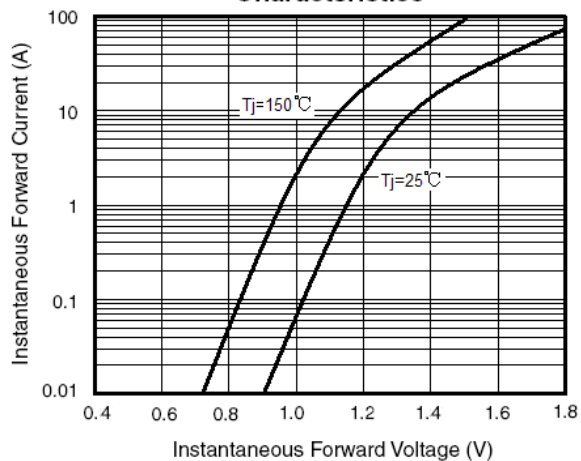
**Fig. 1 - Forward Current Derating Curve**



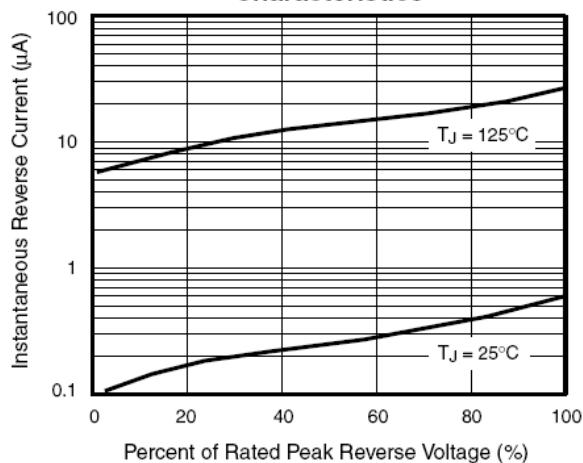
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**

