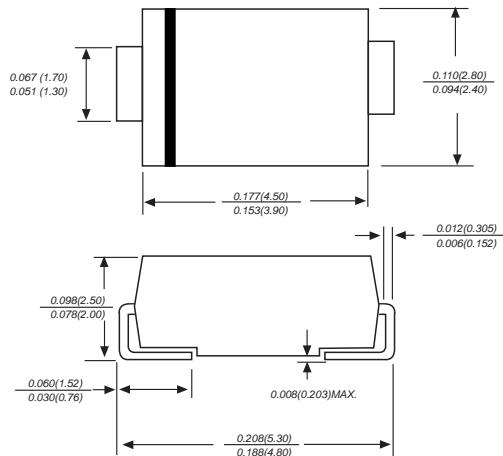


**DO-214AC/SMA**
  
RoHS  
COMPLIANT


  
Pb  
Free

## FEATURE

Plastic package has Underwriters Laboratory Flammability Classification 94V-0  
 For surface mounted applications  
 Low profile package  
 Built-in strain relief  
 Low power loss, high efficiency  
 High current capability, low forward voltage drop  
 High surge capability  
 For use in low voltage high frequency inverters, free wheeling, and polarity protection applications  
 Guard ring for over voltage protection  
 High temperature soldering guaranteed: 250°C /10 seconds at terminals



## MECHANICAL DATA

Case: JEDEC DO-214AC SMA molded plastic body  
 Terminals: Solder plated, solderable per MIL-STD-750,  
 Method 2026  
 Polarity: Color band denotes cathode end

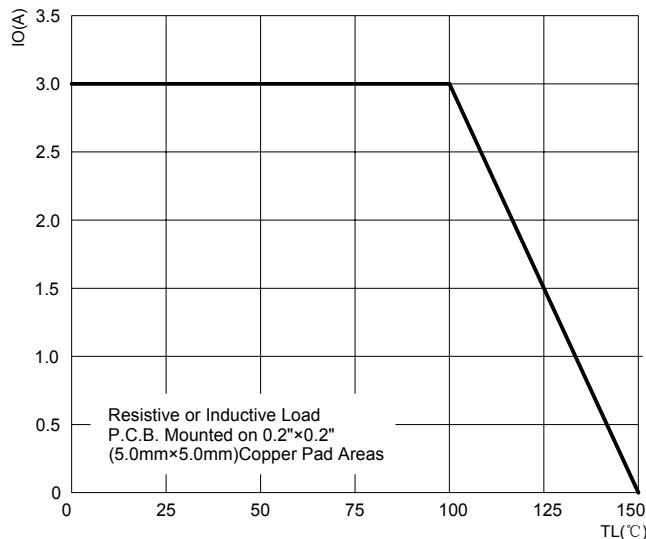
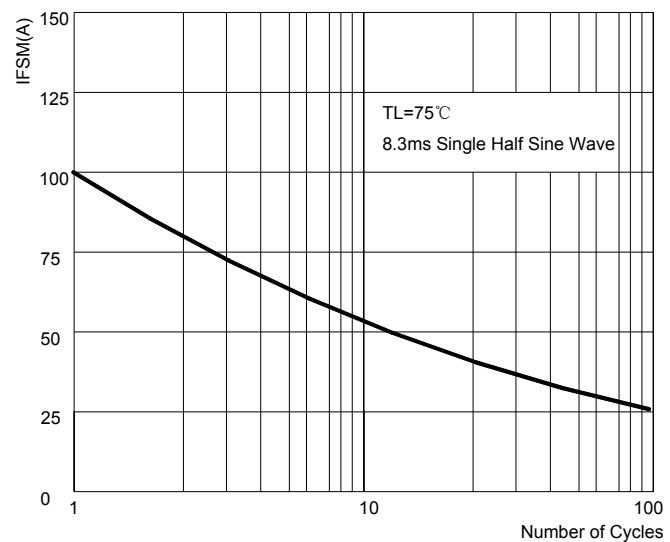
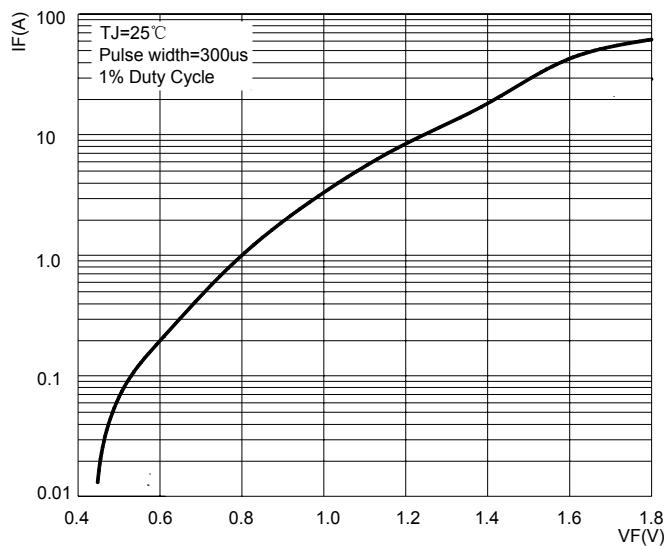
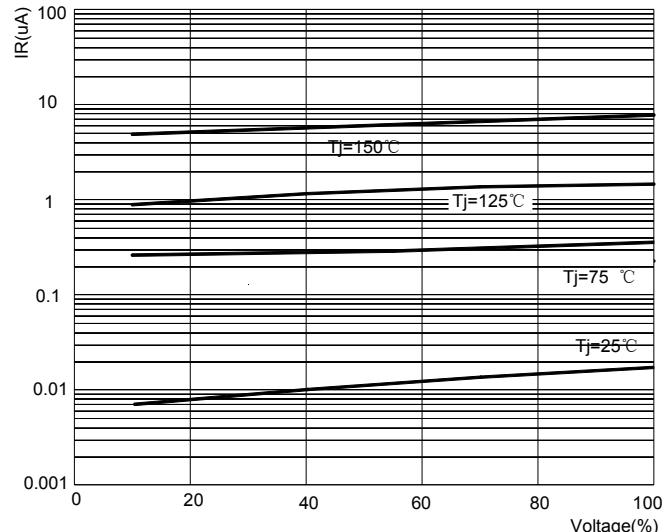
Dimensions in inches and (millimeters)

## 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%

Parameter	Symbol	NSK310	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rmm</sub>	100	V
Maximum RMS Voltage	V <sub>rms</sub>	70	V
Maximum DC blocking Voltage	V <sub>dc</sub>	100	V
Maximum Average Forward Rectified Current	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	100.0	A
Maximum Forward Voltage at rated Forward current (Note 1)	V <sub>f</sub>	0.95	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	0.6 20.0	uA
Typical Thermal Resistance (Note 2)	R <sub>th(ja)</sub>	55.0	°C/W
Storage and Operating Temperature Range	T <sub>stg,Tj</sub>	-55 to +175	°C

Note: 1. Pulse test: 300μs pulse width, 1% duty cycle  
 2. P.C.B. mounted with 0.2 x 0.2inches (5.0 x 5.0mm) copper pad areas

**RATINGS AND CHARACTERISTIC CURVES**
**FIG.1: FORWARD CURRENT DERATING CURVE**

**FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT**

**FIG.3: TYPICAL FORWARD CHARACTERISTICS**

**FIG.4: TYPICAL REVERSE CHARACTERISTICS**

**FIG.5: Diagram of circuit and Testing wave form of reverse recovery time**
