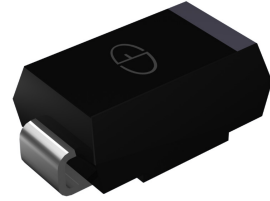


## Features

- ◆ Glass passivated junction chip
- ◆ Low forward voltage drop
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering: 250°C/10 seconds at terminals
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0



**Package: SMA (DO-214AC)**

## Mechanical Data

- ◆ Case: Molded plastic
- ◆ Terminals: Solder plated
- ◆ Polarity: Indicated by cathode end
- ◆ Weight: 0.002 ounce, 0.064gram

## Maximum Ratings (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbols	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1200	V
Maximum RMS Voltage	V <sub>RMS</sub>	840	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	V
Maximum Average Forward Rectified Current (see fig. 1)	I <sub>F(AV)</sub>	1.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30	A
Typical Thermal Resistance per Case (NOTE 1)	R <sub>θJC</sub>	23	°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150	°C

## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Test Conditions	Symbols	Value	Unit
Maximum Instantaneous Forward Voltage	I <sub>F</sub> =1.0A	V <sub>F</sub>	1.7	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	5.0	uA
	T <sub>A</sub> =100°C		100	
Typical Reverse Recovery Time	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A	t <sub>rr</sub>	75	nS
Typical Junction Capacitance	4.0V, 1 MHz	C <sub>J</sub>	15	pF

Notes: 1. Thermal resistance from junction to ambient and from junction to case P.C.B. mounted on 0.2×0.2"(5.0×5.0mm) copper pad areas.

**Ratings and Characteristics Curves**

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

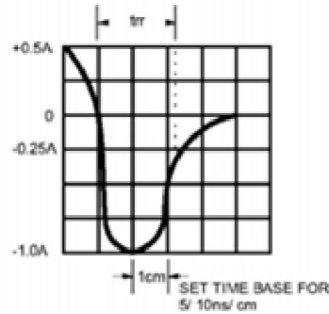
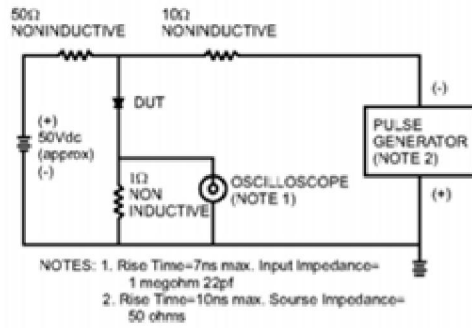


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

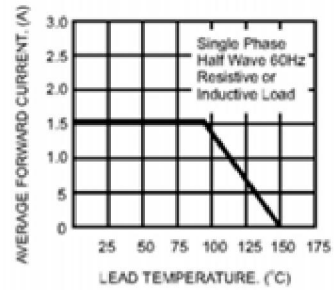


FIG.3- TYPICAL REVERSE CHARACTERISTICS

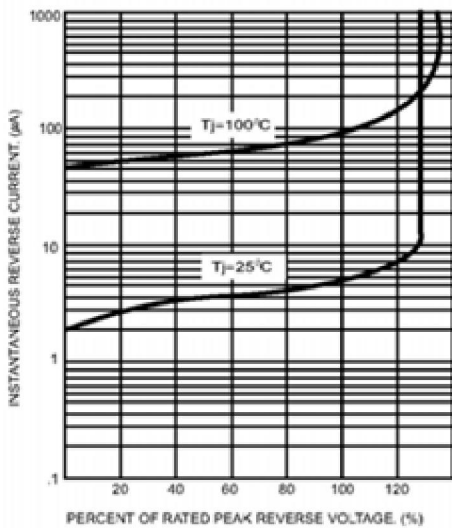


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

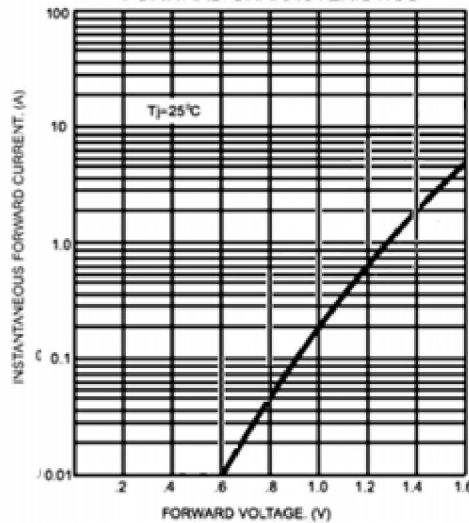


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

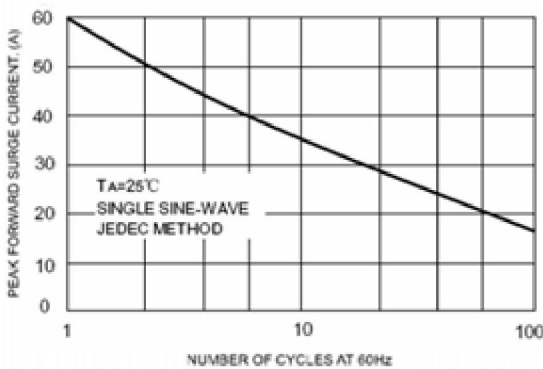
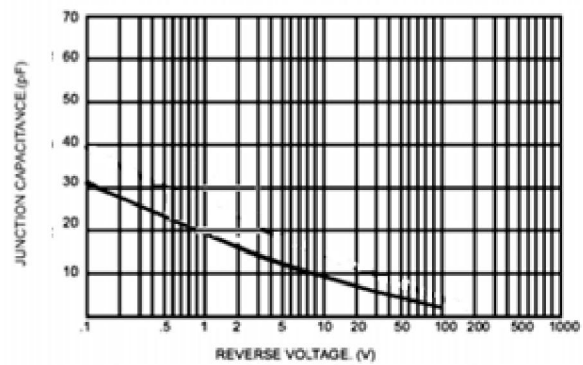


FIG.6- TYPICAL JUNCTION CAPACITANCE



**Package Outline Dimensions**

in inches (millimeters)

Package: SMA (DO-214AC)

