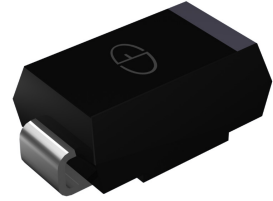


## Features

- ♦ 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	HS10	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	HS10	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	uS
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

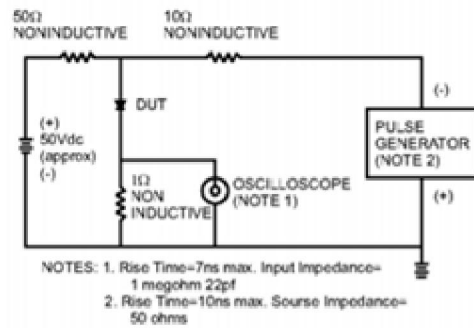


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

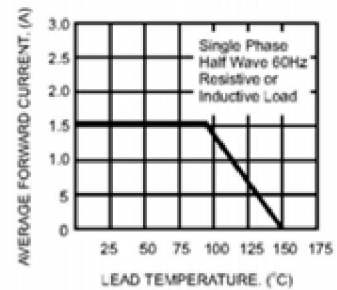


FIG.3- TYPICAL REVERSE CHARACTERISTICS

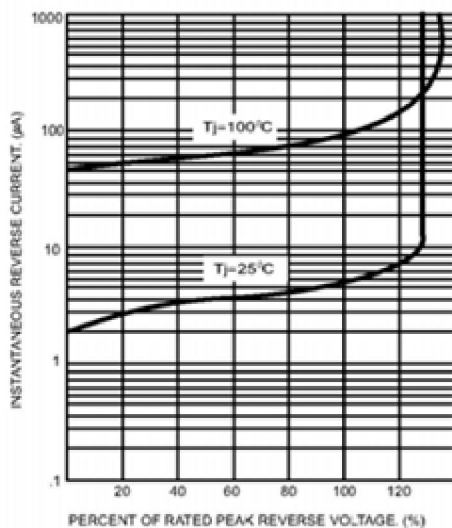


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

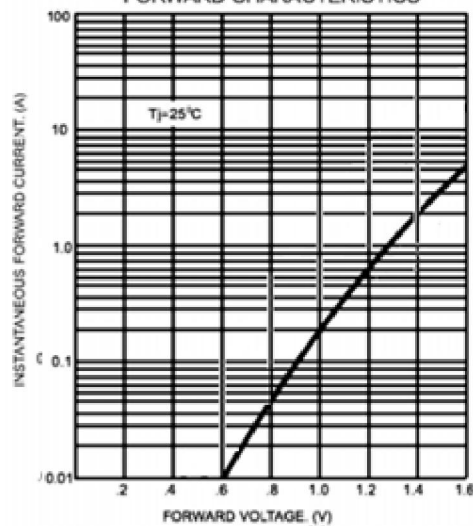


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

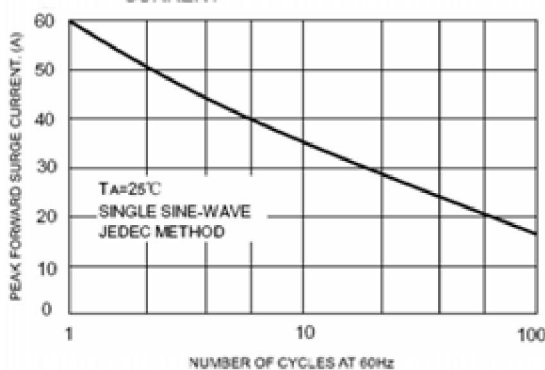
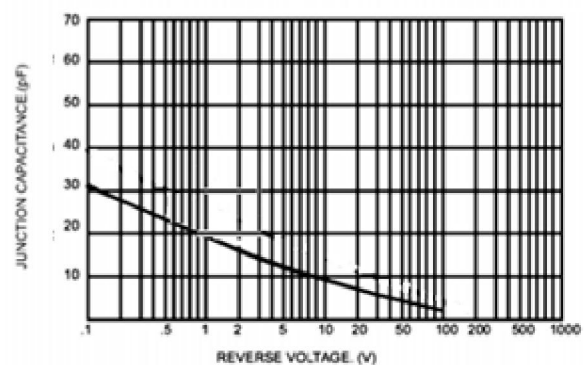


FIG.6- TYPICAL JUNCTION CAPACITANCE



## Package Outline Dimensions

in inches (millimeters)

Package: SMA (DO-214AC)

