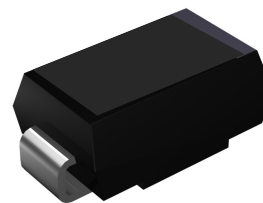


Features

- ◆ 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_A = 25°C unless otherwise noted)

Parameter	Symbols	HS10	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1200	V
Maximum RMS Voltage	V _{RMS}	840	V
Maximum DC Blocking Voltage	V _{DC}	1200	V
Maximum Average Forward Rectified Current (see fig. 1)	I _{F(AV)}	1.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30	A
Typical Thermal Resistance per Case (NOTE 1)	R _{θJC}	23	°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150	°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Test Conditions	Symbols	HS10	Unit
Maximum Instantaneous Forward Voltage	I _F =1.0A	V _F	1.7	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A =25°C	I _R	5.0	uA
	T _A =100°C		100	
Typical Reverse Recovery Time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	75	uS
Typical Junction Capacitance	4.0V, 1 MHz	C _J	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

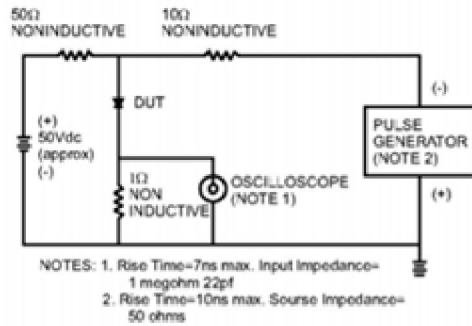


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

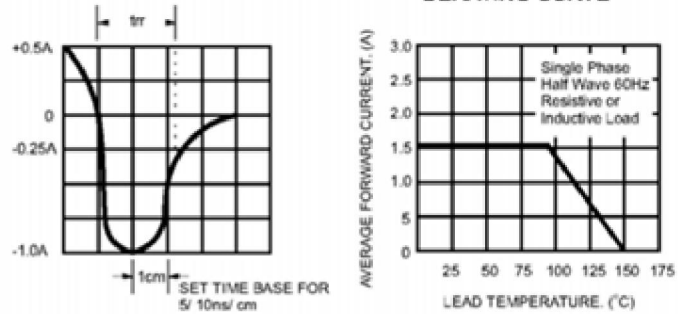


FIG.3- TYPICAL REVERSE CHARACTERISTICS

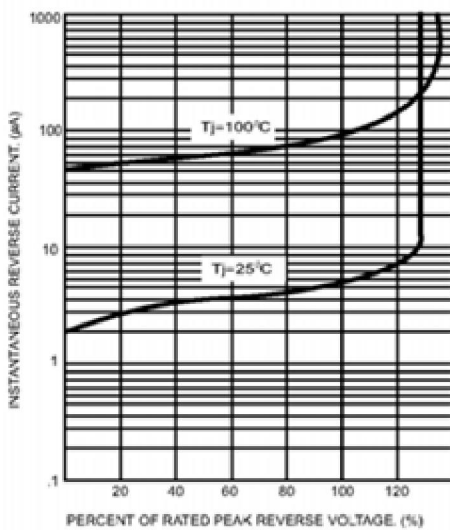


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

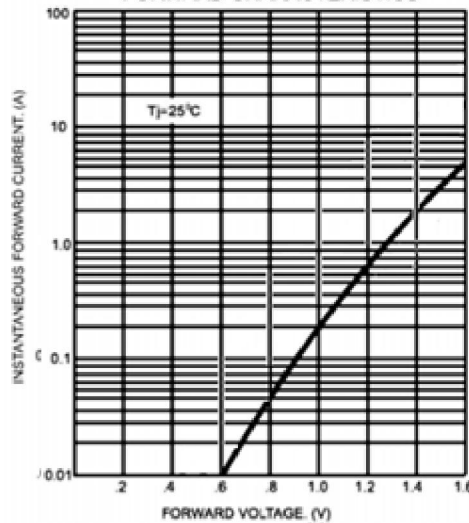


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

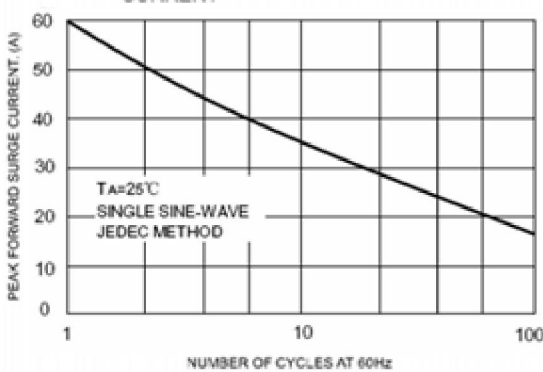
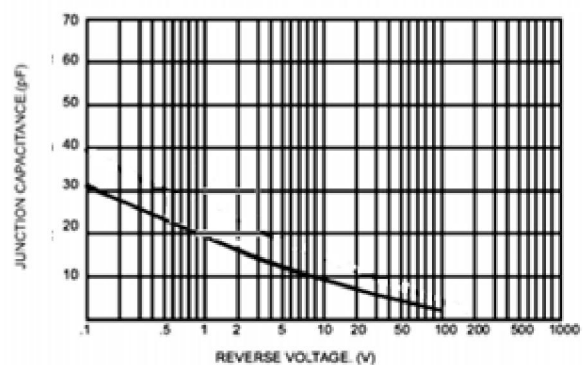


FIG.6- TYPICAL JUNCTION CAPACITANCE



Package Outline Dimensions

in inches (millimeters)

Package: SMA (DO-214AC)

