



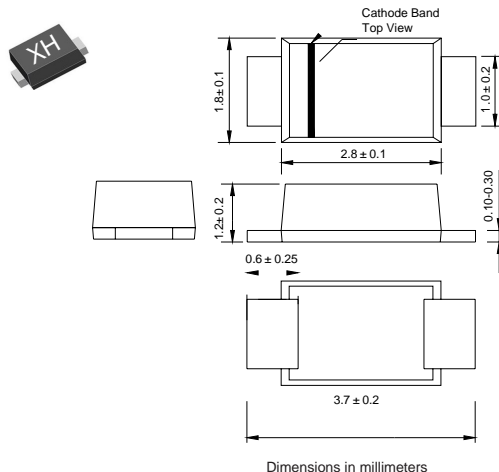
## Features

- For surface mounted application
- Class passivated junction chip.
- Low forward voltage drop
- High current capability
- Easy pick and place
- High surge current capability
- Plastic material used carriers Underwriters Laboratory Classification 94V-O
- High temperature soldering:  
250°C/ 10 seconds at terminals

## Mechanical Data

Case : Molded plastic, JEDEC SOD123 / MNI SMA  
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026  
Polarity : Indicated by cathode band  
Mounting Position : Any  
Weight : 0.04 gram

## SOD-123FL



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz,,resistive or inductive load. For capacitive load, derate by 20%.)

		Symbols	1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	Unis
Maximum Recurrent Peak Reverse Voltage		$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length at $T_A=75^\circ\text{C}$		$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) $T_A=75^\circ\text{C}$		$I_{FSM}$	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A		$V_F$	1.0							Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_c = 25^\circ\text{C}$	$I_R$	5.0							$\mu\text{A}$
	$T_c = 100^\circ\text{C}$		50.0							
Typical Thermal resistance (Note 2)		$R_{\theta JA}$	65.0							$^\circ\text{C/W}$
Typical Junction Capacitance(Note 1)		$C_J$	10.0							pF
Maximum DC Blocking Voltage temperature		$T_A$	+150							$^\circ\text{C}$
Operating and Storage temperature Range		$T_J$ $T_{STG}$	-65 to +150							$^\circ\text{C}$

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. mounted



FIG.1-FORWARD CURRENT DERATING CURVE

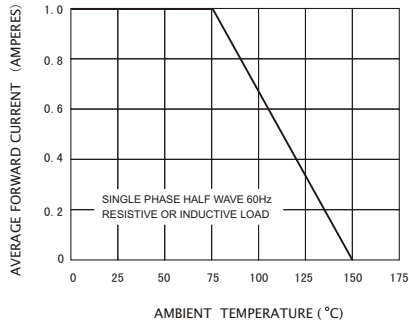


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

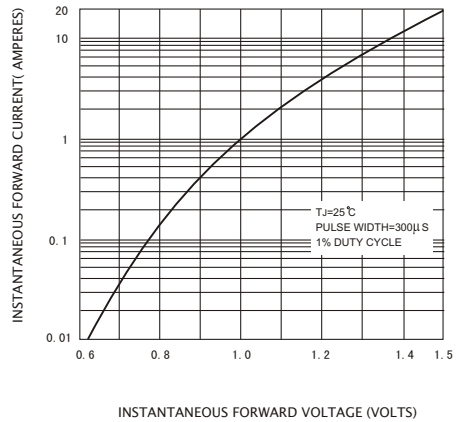


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

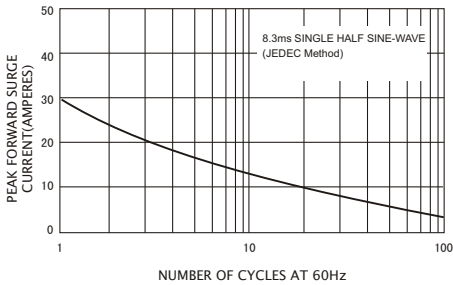


FIG.4-TYPICAL REVERSE CHARACTERISTICS

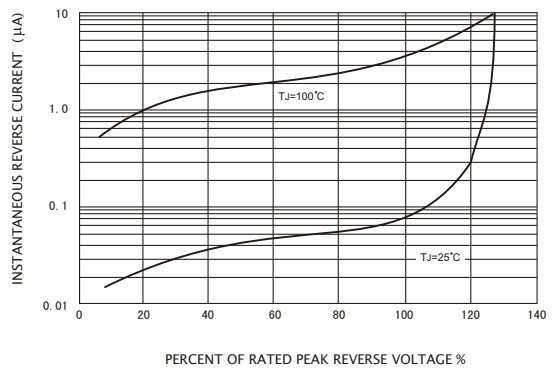


FIG.5-TYPICAL JUNCTION CAPACITANCE

