



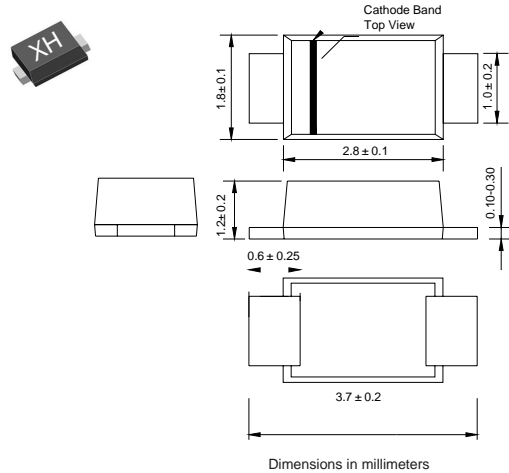
Features

- 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	A1	A2	A3	A4	A5	A6	A7	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 $T_A=75^{\circ}C$	$I_{(AV)}$	1.0							Amp	
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) $T_A=75^{\circ}C$	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	I_R	$T_c = 25^{\circ}C$	5.0							μA
		$T_c = 100^{\circ}C$	50.0							
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	65.0							$^{\circ}C/W$	
Typical Junction Capacitance(Note 1)	C_J	10.0							pF	
Maximum DC Blocking Voltage temperature	T_A	+150							$^{\circ}C$	
Operating and Storage temperature Range	T_J T_{STG}	-65 to+150							$^{\circ}C$	

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

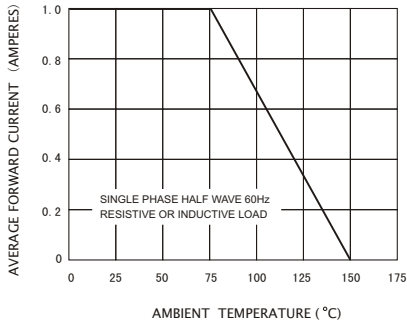


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

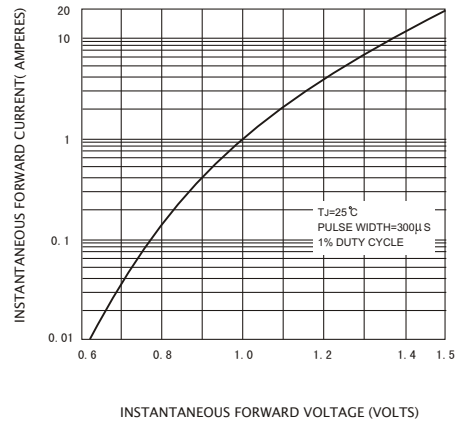


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

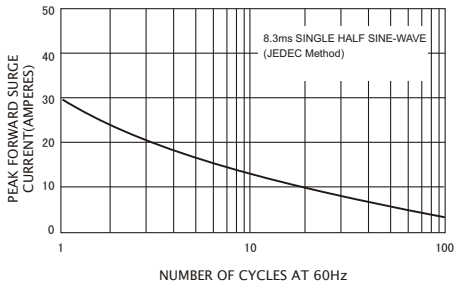


FIG.4-TYPICAL REVERSE CHARACTERISTICS

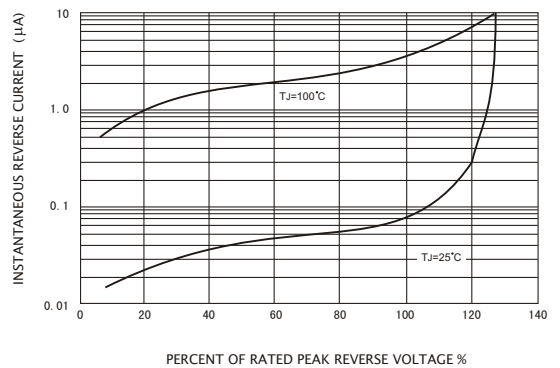


FIG.5-TYPICAL JUNCTION CAPACITANCE

