

SUFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER	Reverse Voltage - 50 to 1000 Volts Forward Current -1.0 Ampere								
<p>SOD-123FL</p> <p style="font-size: small;">Dimensions in inches and (millimeters)</p>	<p>Features</p> <ul style="list-style-type: none"> ◆ Glass passivated device ◆ Ideal for surface mouted applications ◆ Low reverse leakage ◆ Metallurgically bonded construction ◆ High temperature soldering guaranteed: 260°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension <p>Mechanical Data</p> <p>Case: SOD-123FL molded plastic body over passivated chip Terminals: Solderable per MIL-STD-750, Method 2026 Polarity: Color band denotes cathode end Mounting Position: Any Weight:0.0007 ounce, 0.02 grams</p>								
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS									
<p>Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.</p>									
	SYMBOLS	1N4001W A1	1N4002W A2	1N4003W A3	1N4004W A4	1N4005W A5	1N4006W A6	1N4007W A7	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ C$ (NOTE 1)	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	25.0							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							V
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=125^\circ C$	I_R	10.0 50.0							μA
Typical junction capacitance (NOTE 2)	C_J	4							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	95							$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ C$
<p>Note: 1.Averaged over any 20ms period. 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C. 3.PCB mounted on 0.2*0.2" (5.0*5.0mm) copper pad area.</p>									

RATINGS AND CHARACTERISTIC CURVES 1N4001W THRU 1N4007W

