



DATA SHEET

1N4151W

SURFACE MOUNT SWITCHING DIODES

SOD-123

Unit: inch (mm)

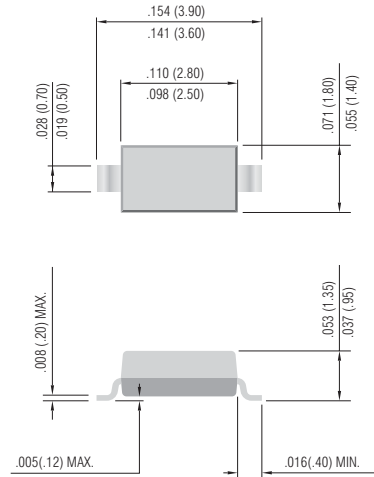
VOLTAGE 50 Volts **POWER** 500 mWatts

FEATURES

- Fast switching Speed.
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion.

MECHANICAL DATA

Case: SOD-123 plastic case.
Terminals : Solderable per MIL-STD-202, Method 208
Standard packaging: 8mm tape
Weight: approximately 0.01g

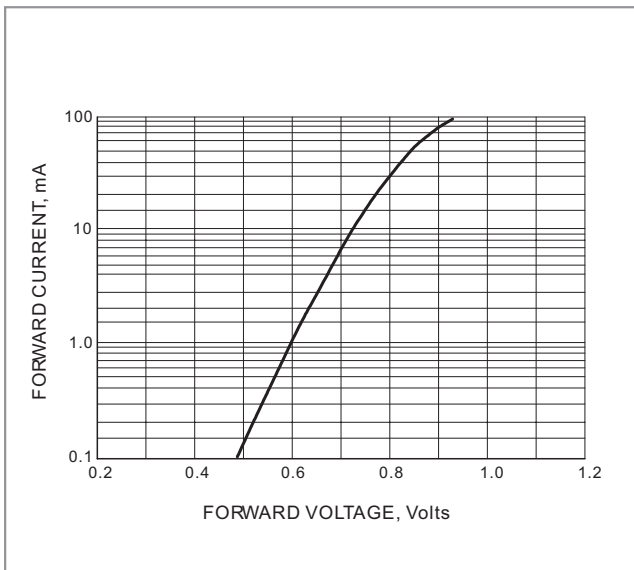


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J=25°C unless otherwise noted)

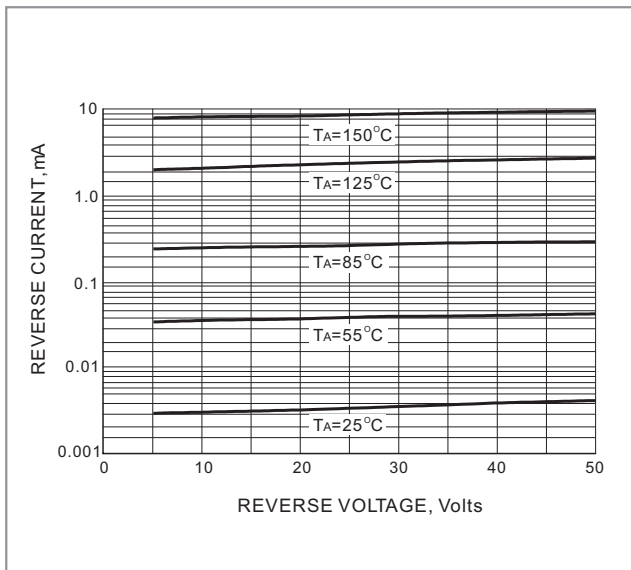
PARAMETER	SYMBOL	1N4151W	UNITS
Marking Code		A5	
Reverse Voltage	V _R	50	V
Peak Reverse Voltage	V _{RM}	75	V
Maximum RMS Voltage	V _{RMS}	35	V
Maximum DC Blocking Voltage	V _{DC}	50	V
Maximum Average Forward Current at T _a =25°C	I _{AV}	150	mA
Peak Forward Surge Current, 1.0s single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	0.5	A
Power Dissipation Derate Above 25°C	P _{TOT}	500	mW
Maximum Forward Voltage	V _F	1.0@0.01A	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J = 25°C	I _R	0.05	uA
Typical Junction Capacitance(Notes1)	C _J	2	pF
Maximum Reverse Recovery (Notes2)	T _{RR}	2	ns
Maximum Thermal Resistance	R _{qJA}	400	°C / W
Storage Temperature Range	T _J		°C

NOTE:

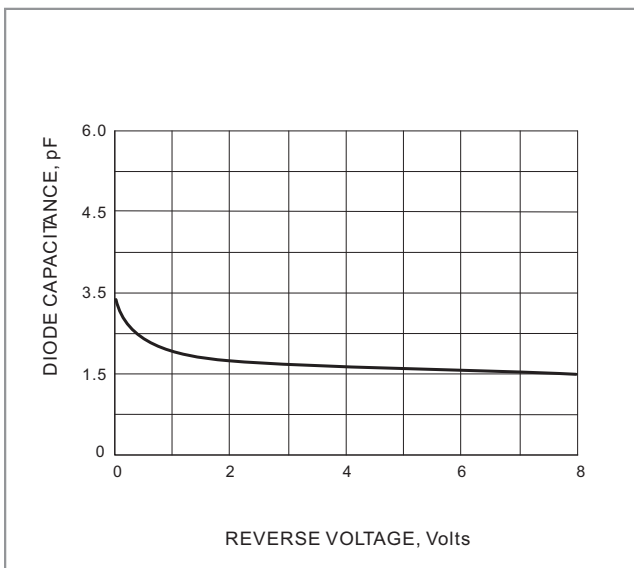
1. C_J at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω



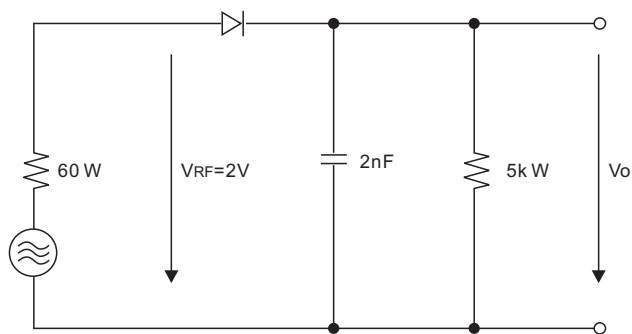
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATICANCE



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT